

Teachers' Retirement Board

Policy Manual

(Updated May 2018)



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Deleted Subsection B. Benchmark Modification Policy and removed any reference to it, and the risks discussed by this policy are now covered in a more comprehensive fashion by the CalSTRS 21 Risk Factors in the IPMP and by the Divestment Policy, September 2009

Deleted Subsection F. Internal Indexed Portfolio Policies from Section 1000 Investment Policy, April 2010

Deleted Subsection G. Cash Equitization Policy from Section 1000 Investment Policy, April 2010

Realphabetized Subsections F through S of the Section 1000 Investment Policy, April 2010

Realphabetized Subsections B through P and Deleted Subsection P from Section 1000 Investment Policy, September 2010

Added Subsection P. Commodity Portfolio Policy to Section 1000 Investment Policy, November 2010

Deleted from Section 1000 Investment Policy under Subsection C the Addendum A – Financial Responsibility Criteria for Corporate Investments, and Addendum B – Statement of Shareowner ESG Responsibility, April 2011

Deleted Corporate Governance Committee Charter and returned Corporate Governance Reporting and Monitoring to the Investment Committee, April 2012

Added Subsection Q. Pension2 403(b) and 457(b) to Section 1000 Investment Policy, May 2014

Deleted Legislative Committee Charter, October 2014

Added Subsection R. Inflation Sensitive Investment Policy, September 2015

Added Subsection S. Risk Mitigating Strategies Policy, February 2016

Deleted Subsection D. Soft Dollar Program Policy from the Section 1000 Investment Policy, and Realphabetized Subsection D through R, June 2016

Added Subsection S. Special Mandate Policy from the Section 1000 Investment Policy, February 2017

Added Subsection H. Policy Review from the Section 500 Board Governance, March 2018

Added Subsection I. Consultant Evaluation Policy from the Section 500 Board Governance, March 2018

Added Subsection J. Routine Reports Policy from the Section 500 Board Governance, March 2018

100 CONSTITUTIONAL AUTHORITY

A. Policy

Article 16, Section 17 of the California Constitution states, in pertinent part:

“Notwithstanding any other provisions of law or this constitution to the contrary, the retirement board of a public pension or retirement system shall have plenary authority and fiduciary responsibility for investment of monies and administration of the system...”

It is contemplated that there may be instances where statutes and processes otherwise applicable to state agencies will interfere with the ability of CalSTRS to exercise its plenary authority and to carry out its fiduciary responsibilities for investment of monies and administration of the system. When and if such situations arise, such matters shall be brought to the full Board for its consideration. The following process shall be followed:

- Staff shall present the Board with an analysis of how the statute or process interferes with CalSTRS’ plenary authority and its ability to fulfill its fiduciary responsibilities. Such analysis shall include:
 - The conflicting laws or other processes at issue;
 - All pertinent facts giving rise to the conflict;
 - All available information establishing interference with CalSTRS plenary authority; and
 - All information establishing interference with the ability to carry out fiduciary responsibilities.
- Where practical, prior to bringing the matter to the Board, Staff shall take steps to resolve its concerns with any applicable control agencies and shall report the outcome to the Board.
- The Board shall consider the matter and make a determination whether the statute or process interferes with or is inconsistent with the Board’s plenary authority and/or fiduciary responsibilities. If a determination is made that there is interference with the Board’s plenary authority and/or fiduciary responsibilities such that it cannot adequately invest monies and/or administer the system, the Board shall direct staff as to what action it shall take, which may include authorizing the initiation of legal action.

B. Existing Agreements, Exemptions, Current Policies and Practices

This policy is not intended to supersede or invalidate any existing agreements, exemptions, or current policies or practices, including but not limited to the following:

1. Budget

By longstanding mutual agreement with the Department of Finance, following Board approval CalSTRS' annual operating budget is submitted to Finance for inclusion in the Governor's annual proposed budget without change or reduction. The Legislature, in turn, has approved these budgets without alteration in the annual Budget bill. Once its annual budget is enacted, CalSTRS has been given the flexibility to reallocate resources internally as deemed appropriate; however, CalSTRS may not exceed its budget notwithstanding changed circumstances absent enactment by the Legislature of a deficiency request. Budget bills provide CalSTRS with the flexibility to "carry over" up to 3% of its operating budget into a future fiscal year upon approval of the Board.

2. Contracts

a. Delegation of Authority: Any contract or purchase which exceeds \$1,000,000 in cumulative value must be approved by the Board itself. For goods and/or services obtained with a vendor through CMAS, approval by the Board itself is required when cumulative purchase orders for a fiscal year with that vendor exceed \$1,000,000. When requesting Board approval for CMAS purchase orders exceeding \$1,000,000 with a vendor, staff shall provide the Board with a breakdown of the total amount for the vendor by project and/or program name. Approval authority for contracts and purchases below \$1,000,000 is delegated to the Chief Executive Officer or his/her designee. Additionally, any sole source contract exceeding \$100,000 will require advance approval by the Board itself and all other sole source contracts will be reported to the Board or appropriate committee.

b. Contracts for the Procurement of Goods and Services: By agreement, approval by the Department of General Services is not required. CalSTRS shall acquire goods and services in the best interest of CalSTRS, its members, and beneficiaries in accordance with prudent business practices and in compliance with the law. Contracts will be made based on a determination by the Chief Executive Officer or his/her designee that the contract is appropriate from a cost-benefit perspective. Contracts for personal services shall include, to the extent appropriate, knowledge transfer provisions to enhance the ability of CalSTRS staff to maintain and operate contracted programs, equipment, and facilities.

In order to ensure that quality products and services are obtained at reasonable prices, CalSTRS will use a competitive bidding process except as provided below. Awards for contracts and purchases will be made to the lowest responsible bidders or the highest scored responsible bidders, depending on the solicitation method utilized. The duration or term of contracts awarded will follow guidelines set forth in SAM unless the Board specifically provides otherwise. Staff shall typically seek maximum economic advantage to CalSTRS in its acquisitions. In unique circumstances, such as emergencies, where there is only a single source, or in other situations such as the purchase of proprietary software, a contract may be awarded without competitive bidding, subject to applicable law and delegations. CalSTRS may also contract for goods and services through the various statewide leveraged procurement agreements (e.g., California Multiple Award Schedules (CMAS)). Consistent with the exemption provided to CalSTRS by Management Memo MM 03-10, CalSTRS may

exceed existing CMAS purchase order limits without obtaining approval of the Department of General Services.

c. Information Technology Procurement: By longstanding agreement, CalSTRS may undertake information technology projects and procurements related to such projects without the review and/or approval of the Department of Finance or other control agencies. CalSTRS will continue to assert its plenary authority and fiduciary responsibility with respect to matters related to the investment of funds and administration of the system. CalSTRS information technology projects and procurements shall be conducted in a manner that ensures that they meet business needs and that expenditures made in their support represent a prudent investment of CalSTRS resources. Information technology projects shall be managed through appropriate project management techniques and in accordance with established security and risk management protocols to ensure both the security of member data and the integrity of CalSTRS systems.

d. Contracts for Legal Services: In furtherance of its plenary authority and fiduciary responsibility with respect to matters related to the investment of funds and administration of the system and by longstanding agreement, CalSTRS may engage the services of outside counsel without approval by the Office of the Attorney General.

3. Agency Review: Although CalSTRS has plenary authority and fiduciary responsibility for investment of funds and administration of the system, CalSTRS will inform the State and Consumer Services Agency of significant activities and developments and will participate as appropriate in Agency meetings of officers from its constituent entities.

4. Out-of-State/Out-of-Country Travel: Requests for out-of-state and out-of-country travel are approved internally by CalSTRS pursuant to its plenary authority and fiduciary responsibility for investment of funds and administration of the system.

C. The California Pension Protection Act of 1992 (Proposition 162) Text:

Section One. Title. This act shall be known and may be cited as "The California Pension Protection Act of 1992."

Section Two. Findings and Declarations. The People of the State of California hereby find and declare as follows:

(a) Retired citizens depend upon their pension benefits to meet basic necessities such as food and shelter during their retirement years. For many elderly citizens who are not eligible to participate in Social Security, pension benefits are their sole source of financial support and security.

(b) Teachers, firefighters, police officers and other local, school and state employees depend on promised pension benefits, which must be protected from political abuse and misappropriation.

(c) Politicians have undermined the dignity and security of all citizens who depend

on pension benefits for their retirement by repeatedly raiding their pension funds.

(d) Political meddling has driven the federal Social Security system to the brink of bankruptcy. To protect the financial security of retired Californians, politicians must be prevented from meddling in or looting pension funds.

(e) Raids by politicians on public pension funds will burden taxpayers with massive tax increases in the future.

(f) To protect pension systems, retirement board trustees must be free from political meddling and intimidation.

(g) The integrity of our public pension systems demands that safeguards be instituted to prevent political "packing" of retirement boards, and encroachment upon the sole and exclusive fiduciary powers or infringement upon the actuarial duties of those retirement boards.

(h) In order to protect pension benefits and to avoid the prospect of higher taxes, the People must act now to shield the pension funds of this state from abuse, plunder and political corruption.

Section Three. Purpose and intent. The People of the State of California hereby declare that their purpose and intent in enacting this measure is as follows:

(a) To protect pension funds so that retirees and employees will continue to be able to enjoy a basic level of dignity and security in their retirement years.

(b) To give voters the right to approve changes in the composition of retirement boards containing elected retirees or employee members.

(c) To protect the taxpayers of this state against future tax increases which will be required if state and local politicians are permitted to divert public pension funds to other uses.

(d) To ensure that the assets of public pension systems are used exclusively for the purpose of efficiently and promptly providing benefits and services to participants of these systems, and not for other purposes.

(e) To give the sole and exclusive power over the management and investment of public pension funds to the retirement boards elected or appointed for that purpose, to strictly limit the Legislature's power over such funds, and to prohibit the governor or any executive or legislative body of any policy subdivision of this state from tampering with public pension funds.

(f) To ensure that all actuarial determinations necessary to safeguard the competency of public pension funds are made under the sole and exclusive direction of the responsible retirement boards.

(g) To affirm the legal principle that a retirement board's duty to its participants and their beneficiaries take precedence over any other duty.

Section Four. Section 17 of Article XVI of the California Constitution is hereby amended to read as follows:

The state shall not in any manner loan its credit, nor shall it subscribe to, or be interested in the stock of any company, association, or corporation, except that the state and each political subdivision, district, municipality, and public agency thereof is hereby authorized to acquire and hold share of the capital stock of any mutual water company or corporation when the stock is so acquired or held for the purposes of furnishing a supply of water for public, municipal or governmental purposes; and the holding of the stock shall entitle the holder thereof to all of the rights, powers and privileges, and shall subject the holder to the

obligations and liabilities conferred or imposed by law upon other holders of stock in the mutual water company or corporation in which the stock is so held.

Notwithstanding any other provisions of law or this constitution to the contrary, the retirement board of a public pension or retirement system shall have plenary authority and fiduciary responsibility for investment of monies and administration of the system, subject to all of the following:

(a) The retirement board of a public pension or retirement system shall have the sole and exclusive fiduciary responsibility over the assets of the public pension or retirement system. The retirement board shall also have sole and exclusive responsibility to administer the system in a manner that will assure prompt delivery of benefits and related services to the participants and their beneficiaries. The assets of a public pension or retirement system are trust funds and shall be held for the exclusive purposes of providing benefits to participants in the pension or retirement system and their beneficiaries and defraying reasonable expenses of administering the system.

(b) The members of the retirement board of a public pension or retirement system shall discharge their duties with respect to the system solely in the interest of, and for the exclusive purposes of providing benefits to, participants and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system. A retirement board's duty to its participants and their beneficiaries shall take precedence over any other duty.

(c) The members of the retirement board of a public pension or retirement system shall discharge their duties with respect to the system with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.

(d) The members of the retirement board of a public pension or retirement system shall diversify the investments of the system so as to minimize the risk of loss and to maximize the rate or return, unless under the circumstances it is clearly not prudent to do so.

(e) The retirement board of a public pension or retirement system, consistent with the exclusive fiduciary responsibilities vested in it, shall have the sole and exclusive power to provide for actuarial services in order to assure the competency of the assets of the public pension or retirement system.

(f) With regard to the retirement board of a public pension or retirement system which includes in its composition elected employee members, the number, terms, and method of selection or removal of members of the retirement board which were required by law or otherwise in effect on July 1, 1991, shall not be changed, amended, or modified by the Legislature unless the change, amendment, or modification enacted by the Legislature is ratified by a majority vote of the electors of the jurisdiction in which the participants of the system are or were, prior to retirement, employed.

(g) The Legislature may by statute continue to prohibit certain investments by a retirement board where it is in the public interest to do so, and provided that the prohibition satisfies the standards of fiduciary care and loyalty required of a retirement board pursuant to this section.

(h) As used in this section, the term "retirement board" shall mean the board of administration, board of trustees, board of directors, or other governing body or board of a public employees' pension or retirement system; provided, however, that the term "retirement board" shall not be interpreted to mean or include a governing body or board created after July 1, 1991 which does not administer pension or retirement benefits, or the elected legislative body of a jurisdiction which employs participants in a public employees' pension or retirement system.

Section Five. Liberal Interpretation. The provisions of this act shall be liberally interpreted to affect their purpose.

Section Six. Conflicting Law. In the event that this measure and another measure or measures relating to the public pension and retirement systems of this state, or any of them, shall appear on the statewide general election ballot on November 3, 1992, the provisions of said measures shall be deemed to be in conflict. In the event that this measure shall receive a greater number of affirmative votes, the provisions of this measure shall prevail in their entirety and the provisions of said other measure or measures shall be null and void. In the event that said other measure or measures shall receive a greater number of affirmative votes, the provisions of this measure shall take effect to the extent permitted by law.

Section Seven. Severability. If any provision of this act shall be found or held by a court of competent jurisdiction to be invalid or unconstitutional for any reason, such invalidity or unconstitutionality shall not affect the remaining provisions of this measure, and to this end the provisions of this measure are severable.

Section Eight. Effective Date. This act shall take effect immediately upon certification of the official canvass by the Secretary of State.

Adopted January 14, 1993
Amended February 3, 2005
Amended April 2, 2009
Amended February 3, 2010

200 STATUTORY AUTHORITY

KEY EDUCATION CODE PROVISIONS

A. Purpose of System

In order to provide a financially sound plan for the retirement, with adequate retirement allowances, of teachers in the public schools of this state, teachers in schools supported by this state, and other persons employed in connection with the schools, the State Teachers' Retirement System is established. The System is a unit of the State and Consumer Services Agency.

Education Code Section 22001

B. Board Powers

- a) The board shall set policy and shall have the sole power and authority to hear and determine all facts pertaining to application for benefits under the plan or any matters pertaining to the administration of the plan and the system.
- b) The board shall meet at least once every calendar quarter at such times as it may determine. The meetings shall be presided over by the chairperson. In the event of the chairperson's absence from a meeting, the vice-chairperson shall act as presiding officer and perform all other duties of the chairperson.

Education Code Section 22201

C. Board Delegation

The board may appoint a committee of two or more of its members to perform any act within the power of the board itself to perform. The board may also delegate authority to the chief executive officer to perform any such act. Except where the board, in delegating that authority, provides that the committee or the chief executive officer may act finally, all acts of the committee or the chief executive officer shall be reported to the board at its next regular meeting and shall be subject to review, ratification, or reversal by the board.

The delegations of authority will be reviewed at least once every two years or more often as necessary.

Reference Education Code Section 22208

Amended on June 8, 2017 to add delegation of authority review timeline

- * *Please refer to Appendix 1 for the current delegation of authority from the Board to the Chief Executive Officer.*

D. CEO Authority

The chief executive officer has the authority and responsibility for the administration of the system and the plan pursuant to the policies and rules adopted by the board. The chief executive officer may delegate to his or her subordinates any act or duty unless the board by motion or resolution recorded in its minutes has required the chief executive officer to act personally.

Education Code Section 22301

** Please refer to Appendix 2 for current delegations of authority from the Chief Executive Officer to other System personnel.*

E. Board Composition

1. The plan and the system are administered by the Teachers' Retirement Board. The members of the board are as follows:
 - a. The Superintendent of Public Instruction
 - b. The Controller
 - c. The Treasurer
 - d. The Director of Finance
 - e. Three persons who are either members of the Defined Benefit Program or participants in the Cash Balance Benefit Program, as follows:
 - (1) One person who, at the time of election, is an active member of the Defined Benefit Program or an active participant of the Cash Balance Benefit Program employed by a school district that provides instruction for grades K to 12, inclusive, or a county office of education, in a position other than a school administrator that requires a services credential with a specialization in administrative services. This member shall be elected by the active members of the Defined Benefit Program and active participants of the Cash Balance Benefit Program who are employed by a school district that provides instruction for grades K to 12, inclusive, or county office of education, pursuant to regulations adopted by the board, for a four-year term commencing on January 1, 2004.
 - (2) One person who, at the time of election, is an active member of the Defined Benefit Program or an active participant of the Cash Balance Benefit Program employed by a school district that provides instruction for grades K to 12, inclusive, or a county office of education. This member shall be elected by the active members of the Defined Benefit Program who are employed by a school district that provides instruction for grades K to 12, inclusive, or a county office of education, pursuant to regulations adopted by the board, for a four-year term commencing on January 1, 2004.

- (3) One person who, at the time of election, is a community college instructor and an active member of the Defined Benefit Program or an active participant of the Cash Balance Benefit Program employed by a community college district, who shall be elected by the active community college members of the Defined Benefit Program and the active community college participants of the Cash Balance Benefit Program, pursuant to regulations adopted by the board, for a four-year term commencing on January 1, 2004.
 - f. Five persons appointed by the Governor for a term of four years, subject to confirmation by the Senate, as follows:
 - (1) One person who, at the time of appointment, is a member of the governing board of a school district or a community college district.
 - (2) One person who is either a retired member under this part or a retired participant under Part 14 (commencing with Section 26000).
 - (3) Three persons representing the public, whose terms shall be staggered by varying the first terms of these members.
2. The members of the board shall annually elect a chairperson and vice chairperson.

*Education Code Section 22200
Amended January 1, 2004*

300 MISSION AND VALUES STATEMENT

Mission: Securing the financial future and sustaining the trust of California's educators.

Values: CalSTRS affirms the following in all its working relationships:

Customer service – We never compromise on quality as we strive to meet or exceed the expectations of our customers.

Accountability – We operate with transparency and accept responsibility for our actions.

Leadership – We model best practices in our industry and innovate to achieve higher standards.

Strength – We ensure the strength of our system by embracing a diversity of ideas and people.

Trust – We conduct ourselves with integrity, acting ethically in every endeavor.

Respect – We respect the needs of our members, co-workers, and others, treating everyone with fairness, honesty, and courtesy.

Stewardship – We recognize our fiduciary responsibility as the foundation for all decision-making.

400 LEGISLATION

The adopted mission of the California State Teachers' Retirement System (CalSTRS) is to secure the financial future and sustain the trust of California's educators. A secure retirement is facilitated by the enactment of laws and regulations that enable the Teachers' Retirement Board (board) to (1) receive adequate and predictable contributions from members, employers and the state; (2) invest those contributions in a prudent manner; (3) provide benefits at a cost consistent with the resources available to CalSTRS; and (4) respond to the changing needs of its members and employers. The board recognizes that, although CalSTRS is the predominant source of retirement funds for California's public educators, it is not the only factor in retirement security. Other considerations include:

- CalSTRS members do not receive Social Security benefits for their service and oftentimes face reductions in Social Security benefits earned from other employment;
- Financial support for health care after retirement is determined by individual local collective bargaining decisions, resulting in inconsistent affordability of health care after retirement;
- CalSTRS benefits are often not sufficient for individual members to maintain their standard of living after retirement without individual supplemental retirement savings.

The board's legislative policies are driven by an overall goal to prevent and remove obstacles that impair the ability of CalSTRS members to achieve financial security.

To carry out these legislative policies, the board directs staff to make reasonable efforts to promote passage of pending state and federal legislation or regulations sponsored or supported by the board, to negotiate amendments to pending legislation or regulations as appropriate and necessary, and to defeat legislation or regulations opposed by the board.

The board authorizes staff to represent the same position the board had previously taken on substantively identical legislation during the current legislative session.

If the board is unable to take a position on the legislation or regulations in a timely manner, the board delegate's authority to the Chair and Vice Chair to adopt a position on legislation or regulations based on the following guidelines if expressing the position would aid in executing the board's policy. Upon action via delegation, the reason for delegation and the position taken shall be communicated to the board immediately. The minutes of the next board meeting shall reflect the delegation, the reason for delegation and the position taken.

Positions of support, neutral, no position or oppose are based on the following guidelines. Additional information and guidance about these positions is provided under the Definition of Board Positions on State or Federal Legislation or Regulations.

- I. Sponsor or support legislation and regulations that:
 - A. Are consistent with the objectives of providing financially sound primary and supplemental retirement plans for California's educators.
 - B. Expand and improve in a prudent manner the benefits and services provided through the funds administered by CalSTRS as appropriate for public retirement plans.

Expanded benefits and services may be funded from:

1. Available surplus assets of CalSTRS, including normal cost surpluses;
 2. Available resources of the Defined Benefit Program up to a total present value cost over 30 years equal to .001 percent of annual creditable compensation upon which a member's contributions to the Defined Benefit Program are based;
 3. Available resources or increased contributions or both for legislation that is needed to address benefit equity issues, impairment of benefits or other special situations, as determined by the board;
 4. Additional contributions to CalSTRS.
- C. Improve the delivery of benefits and services and provide more effective and efficient administration of the retirement plan. In recognition of the requirement that the authority of the board to spend funds from the Teachers' Retirement Fund in support of CalSTRS is subject to legislative approval, legislation requiring one-time additional administrative costs greater than \$50,000 adjusted to the next \$1,000 in February of each year for increases in the California Consumer Price Index from December 2007 through December of the prior calendar year would require an appropriation to provide CalSTRS with the spending authority necessary to cover the implementation costs of the bill.
- D. Are consistent with the investment policy adopted by the board as presented in the CalSTRS Investment Policy and Management Plan.
- E. Preserve the assets and minimize the liabilities of the funds administered by CalSTRS.
- F. Reduce inequities or deficiencies in plan design.
- G. Give more flexibility to the board in its administration.
- H. Improve the opportunity for members to save using pre-tax vehicles.
- I. Attempt to secure and obtain monies owed by the state or federal government.
- J. Seek to repeal or reform in a prudent manner the Social Security benefit offsets as a means of addressing concerns about their impact on educators.
- K. Seek to expand access to health benefits for CalSTRS members in a prudent manner.
- II. Adopt a neutral position or no position on legislation and regulations that:
- A. Do not significantly or adversely impact the benefits or services provided through the funds administered by CalSTRS or the administration of the retirement plans.
 - B. Affect the composition of the board or the process by which individuals are appointed to serve as members of the board. The board may, however, sponsor or

support provisions of legislation deemed necessary to clarify or implement enacted legislation that either provides for the election of members or otherwise changes the composition of the board.

III. Oppose legislation and regulations that:

- A. Adversely affect the actuarial balance of the funds administered by CalSTRS through legislation not affecting the board's investment authority, or result in adverse selection against a retirement plan.
- B. Expand or improve the benefits or services provided through the funds administered by CalSTRS without adequate funding or provide benefits or services that are not appropriate for public retirement plans.
- C. Deprive members or participants of vested benefits and do not provide equivalent, compensating benefits.
- D. Benefit only one individual or a small group of individuals within a larger group, unless the board determines an inequity exists which the legislation or regulation would correct.
- E. Restrict or infringe on the plenary authority of the board to administer the retirement plans as provided in Section 17 of Article XVI of the California State Constitution.
- F. Restrict the investment authority of the board or are inconsistent with the investment policy adopted by the board as presented in the CalSTRS Investment Policy and Management Plan.
- G. Appropriate amounts from the funds administered by CalSTRS for purposes that are not solely in the best interest of the members, participants or beneficiaries of the retirement plans.
- H. Endanger the Trust or the tax-exempt status of retirement plans administered by CalSTRS and the deferred treatment of income tax on employer contributions to the plans and related earnings.
- I. Are inconsistent with provisions of Section 403(b) of the Internal Revenue Code of 1986 and the Revenue and Taxation Code that are applicable to the System's annuity contract and custodial account.
- J. Conflict with CalSTRS' strategic directions or policies established by the board.
- K. Impose mandatory Social Security coverage on CalSTRS members without an increase in funding to offset the increased costs to members and employers.
- L. Make changes to the structure of benefits provided through the funds administered by CalSTRS that would adversely affect the funding of CalSTRS benefits or that would be impracticable to administer.

Education Code References: 22001; 22250; 22330

Amended on February 1, 2017

Amended on September 5, 2007

Amended on July 8, 2004

DEFINITION OF BOARD POSITIONS ON PROPOSED STATE OR FEDERAL LEGISLATION OR REGULATIONS

SPONSOR or CO-SPONSOR

- Indicates that the board has initiated or strongly supports the proposed change and has ownership or co-ownership of the proposal.
- Authorizes CalSTRS staff to pursue a commitment from member(s) of the Legislature or Congress to carry the proposal.
- Makes CalSTRS staff responsible for providing the member(s) and staff of the Legislature or Congress the necessary support to promote passage of the proposal, including advice regarding strategy, proposed statutory language, written analyses and testimony at legislative or congressional proceedings.

SUPPORT

- Indicates that the proposal impacts CalSTRS or its stakeholders and that the board believes the proposal is good policy or good administrative practice and should become law.
- Requires testimony at legislative proceedings and written analyses, letters or other documentation as necessary to promote passage of the proposal.

SUPPORT, RECOMMEND AMENDMENTS

- Indicates that although the board supports the underlying policy, substantive and/or technical amendments are needed to appropriately implement and administer the change if enacted.
- Authorizes CalSTRS staff to draft amendments recommended by the board and work with the author to incorporate the amendments into the measure.
- Requires testimony at legislative proceedings and assistance in developing necessary amendments and written analyses, letters or other documentation as necessary to promote passage of the proposal.
- Whether or not recommended amendments are adopted, authorizes CalSTRS staff to represent the board's official position as "support."

SUPPORT, IF AMENDED

- Indicates that although the board supports the underlying policy, substantive and/or technical amendments are needed to enable CalSTRS to fully support the policy or to appropriately implement and administer the change if enacted.
- Authorizes CalSTRS staff to draft amendments requested by the board and work with the author to incorporate the amendments into the measure.
- Provides limited leverage in negotiating amendments with sponsor(s).
- Requires testimony at legislative proceedings and assistance in developing necessary amendments and written analyses, letters or other documentation as necessary.
- If requested amendments are adopted, authorizes CalSTRS staff to represent the board's official position as "support."

NEUTRAL

- Indicates that although the proposal affects CalSTRS or its stakeholders, the board has no concerns regarding the proposal.
- Does not require testimony at legislative proceedings but does require written analyses, letters or other documentation as necessary, and monitoring. Requires CalSTRS staff to provide technical

assistance or advice as requested by members or staff of the Legislature or Congress.

NEUTRAL, IF AMENDED

- Indicates that although the proposal affects CalSTRS or its stakeholders, the board has no concerns regarding the proposal; however, substantive and/or technical amendments are needed to enable CalSTRS to appropriately implement and administer the change if enacted.
- Authorizes CalSTRS staff to draft amendments requested by the board and work with the author to incorporate the amendments into the measure.
- Does not require testimony at legislative proceedings but does require written analyses, letters or other documentation as necessary, and monitoring. Requires CalSTRS staff to provide technical assistance or advice as requested by members or staff of the Legislature or Congress.
- If requested amendments are adopted, authorizes CalSTRS staff to represent the board's official position as "neutral."

NO POSITION

- Indicates either that the proposal has minimal impact on CalSTRS or its stakeholders and the board has no concerns regarding the proposal or that the board believes it would not be appropriate to make a public statement concerning the policy of the proposal.
- Does not require testimony at legislative proceedings but does require written analyses, letters or other documentation as necessary, and monitoring. Requires CalSTRS staff to provide technical assistance or advice as requested by members or staff of the Legislature or Congress.

OPPOSE, UNLESS AMENDED

- Indicates that the proposal affects CalSTRS or its stakeholders and that the board will not support or be neutral concerning the policy of the proposal, unless amendments proposed by CalSTRS are adopted.
- Provides significant leverage in negotiating amendments with sponsor(s).
- Requires testimony at legislative proceedings and assistance in developing necessary amendments and written analyses, letters or other documentation as necessary.
- If requested amendments are adopted and CalSTRS staff recommends a position of:

“Support” on the proposal as amended, requires that the proposal must be resubmitted to the board for formal action.

“Neutral” on the proposal as amended, does not require that the proposal be resubmitted to the board for action (unless otherwise directed by the board) and authorizes CalSTRS staff to represent the board's official position as “neutral.”

OPPOSE

- Indicates that the board believes the proposal conflicts with the board's policy and should not become law.
- Requires testimony at legislative proceedings and written analyses, letters or other documentation as necessary to defeat the proposal.

WATCH

- Indicates the measure does not directly affect CalSTRS benefits, programs or administration but addresses an issue of concern to the board or may at some point in the future be amended to include provisions substantively affecting CalSTRS or its stakeholders.
- Requires CalSTRS staff to periodically inform the board on the status of such measures. If the

measure is amended to affect CalSTRS, requires CalSTRS staff to present additional information to the board and recommend a position on the measure.

STAFF RECOMMENDATION

- Indicates the proposal affects CalSTRS or its stakeholders, but the board has not yet had an opportunity to discuss the legislation and adopt an official position.
- Responsibilities or activities assigned to CalSTRS staff that are related to federal legislation or regulations will be coordinated with, or delegated to, CalSTRS' federal legislative representative, as appropriate.

500 BOARD GOVERNANCE AND ADMINISTRATION

A. Election of Officers

1. The election of the Board Chair and Vice-chair shall be held at the regularly scheduled Board meeting in May of each calendar year as the first agenda item. Intervening elections may be called by a 2/3rd majority of the Board. In determining the 2/3rd majority, vacant positions on the Board shall not be considered.
2. The election of the Chair and Vice-chair shall be by majority vote of the Board with a run-off to be held in the event that no candidate receives a majority of the first ballot. Where there is more than one candidate, the vote is to be conducted by secret ballot. The election shall be run by the Chief Executive Officer.

Amended April 6, 2005

Amended April 3, 2008

Amended June 8, 2017

B. Committees

1. Committee assignments and chairs and vice-chairs shall be proposed by the Board Chair annually at the May Board meeting and at such other times as vacancies occur. The Chair's proposals shall be set forth on the agenda as a consent item. The Chair, in his or her discretion, may elect not to make Committee Vice-Chair assignments, if this is not feasible due to Board vacancies. During the Board's consideration of the consent item, any Board member may withdraw an assignment from the consent item for review by the Board. Alternate members may be appointed on an as-needed basis by the Chair.
2. All Committee meetings of the Board shall be open to all Board members, but only Committee members may vote.

Amended April 6, 2005

Amended April 3, 2008

Amended June 8, 2017

C. Duties of the Chair

The Board Chair shall assure that the Board operates consistent with statutes, procedures and policies; preside over Board meetings; subject to Board approval in accordance with Section 500(B), appoint chairs, vice-chairs and members to the various Board committees; supervise the Chief Executive Officer (CEO); execute on behalf of the Board delegations of various responsibilities to the CEO and other staff and other duties as deemed necessary; exercise final authority over Board and Committee agendas and supporting materials.

Amended April 6, 2005

Amended April 8, 2016 to reflect technical changes to the policy section cross-reference

D. Board Member Responsibilities

1. Attendance. All Board members (or their delegates) are expected to attend all Board and applicable committee meetings. While attendance is not always possible, Board members should, once the calendar for a year is set, immediately flag any scheduling conflicts and thereafter manage their schedules to avoid creating additional conflicts. Absences for medical or other substantial reasons shall be deemed excused absences in the discretion of the Board Chair.
2. Committee service. Each Board member should serve on at least one standing committee or ad hoc committee in addition to serving on the Investment Committee.
3. Preparation. Board members should come to Board meetings having read the materials prepared and circulated by staff.
4. Education. Board members should identify areas where they might benefit from additional education and work with staff to find educational opportunities. Board members should fulfill the training expectations outlined in subsection (D)(a) of this Section and are required to attend additional educational opportunities as outlined in Section (D)(a)(5).
5. Representation. At times, Board members may be called on to represent CalSTRS to various constituencies, including officers of state government, state agencies, or other groups.
6. Collegiality. Members shall make every effort to engage in collegial deliberations, and to maintain an atmosphere where Board or committee members can speak freely, explore ideas before becoming committed to positions, and seek information from staff and other members. To the extent possible, members are encouraged to come to meetings without having fixed or committed their positions in advance.
7. Independence. CalSTRS Board members and their delegates shall, upon taking office, sign a pledge confirming their independence and their understanding of fiduciary duties. The pledge shall be reviewed annually and shall read as follows:

“I understand that as a Board member, I must discharge my duties as a fiduciary with respect to CalSTRS solely in the interest of its members and beneficiaries as further set forth in Sections 22250 through 22253 of the Education Code. I also understand the unique independent status that California public pension funds such as CalSTRS holds, as reflected in the following finding of Proposition 162: ‘The integrity of our public pension systems demands that safeguards be instituted to prevent political ‘packing’ of retirement boards, and encroachment upon the sole and exclusive fiduciary boards or infringement upon the actuarial duties of those retirement boards.’ My signature below affirms my pledge to conduct myself in accordance with these understandings.”

8. Code of Conduct. In keeping with the responsibilities outlined in this section, Board members shall, annually, affirm their commitment thereto by signing the following code of conduct. The code of conduct shall be reviewed annually and shall read as follows:

“We, the Trustees of CalSTRS, recognize that we are the leadership and ultimate fiduciaries for CalSTRS. As such, we are responsible for governing the System in the best way we can and to act solely in the interest of its members and beneficiaries (as set forth in Sections 22250 through 22253 of the Education Code).

We pledge not to allow political interference or any form of intimidation affect our judgment in the exercise of our fiduciary responsibilities. We accept our responsibility to avoid actual and perceived conflicts of interest. Where avoidance is not possible, we will disclose and mitigate conflicts to the best of our abilities. We agree not to engage in any acts of self-dealing.

We acknowledge that we are subject to the disclosure and reporting requirements of the System's Conflict of Interest (COI) Code and Fair Political Practices Commission (FPPC) regulations. We have the personal responsibility to ensure that gifts, honoraria, and travel expenses received are disclosed and reported under the System's COI Code and FPPC regulations.

To meet the high standard of prudence for fiduciaries, we understand that education is important. We accept our personal responsibility to attend educational sessions and conferences, and to share the knowledge with each other.

We, the Board, consider the diversity of experience and opinions among us to be a strength, not a weakness. When differing viewpoints are expressed during our meetings, we will be respectful in our discussions.”

9. Avoidance of Appearance of Nepotism. Even if otherwise permissible under State conflict of interest laws and/or Board policy, Board members should avoid participating in CalSTRS matters in which a close relation of the Board member has a personal, managerial or substantial financial interest. A “close relation” is defined as a spouse, mutual financial dependent, significant other or person in an intimate relationship; a child, parent, sibling (including in-laws and step-relations), grandparent or grandchild, niece or nephew, aunt, uncle or cousin. A “substantial financial interest” exists if the personal financial effect of the CalSTRS matter on the close relation would be \$250 or more in a 12-month period and that effect is particular to the close relation as opposed to affecting a much larger group. For example, under this policy, a Board member would not be precluded from participating in a decision to recommend legislation that would increase the percentage cost-of-living adjustment paid to all retirees even if the Board members’ mother would

receive this increase along with all other retirees. However, if the Board member's mother files an appeal that contends that her specific cost-of-living adjustment had been calculated incorrectly by CalSTRS, under this policy the Board member would be precluded from participating in the decision regarding this appeal.

Amended April 6, 2005

Amended November 3, 2006

Amended April 3, 2008

Amended April 8, 2010, Section I. Board Member Responsibilities to incorporate the Code of Conduct

a. Education Policy

1. Purpose

In order to permit Board Members to discharge their fiduciary duties under the California Constitution and the Education Code to act with care, skill, prudence, and diligence and to ensure that all Board Members have a full understanding of the issues facing CalSTRS, the Board has adopted orientation and mentoring programs, mandatory fiduciary education, ethics training sessions and continuing education; and makes available appropriate periodicals to foster Board Member awareness of relevant developments. Participation on certain committees, including but not limited to Audits and Risk Management (ARM) and Appeals, will require educational development. The Annual Work plan for each committee will set forth educational requirements for the year.

2. Definitions

For purposes of this Education Policy only, the following definitions apply:

- a. The terms "Board Member" and Board Members" mean member-elected, appointed and ex-officio Teachers' Retirement Board members and their Primary Delegates.
- b. The term "Primary Delegate" means a delegate of an ex-officio board member who acts in a representative capacity in one (1) or more board or committee meetings per calendar year for their respective office.
- c. The term "Continuing Education" includes any educational opportunity which assists the Board Member in the performance of their official duties.

3. Orientation of New Board Members

- Attendance. Each new Board Member shall attend an orientation session.

- Timing for Orientation. The new Board Member is urged to attend the orientation session before sitting at the first Board meeting as a voting member.
- Development and Content. The orientation sessions will be developed by the CEO and will, at a minimum, include the following topics:
 - A brief history and overview of CalSTRS, including the mission and purpose of the System
 - A summary of the laws and rules governing CalSTRS and the Board
 - A summary of the CalSTRS benefit structure
 - An overview of the role of the system actuary
 - An explanation of Proposition 162 and its effect on CalSTRS in contrast to state agencies
 - An explanation of fiduciary responsibility, conflicts of interest, and ethics
 - An explanation of the strategic plan and the process
 - A high level review of existing Board policies
 - A briefing on current and emerging issues before the Board
 - A review of Board committees and their purposes
 - Biographical information on the other Board members
 - A review of best practices for Board governance
 - An introduction to CalSTRS' Executive Management team
 - A tour of the CalSTRS offices, if practicable.
- Materials. At or before the orientation session, the following documents will be made available to new members:
 - A listing of names, addresses, and contact information for the Board Members
 - A listing of names, addresses, and contact information for Executive Management
 - The Board Member Handbook, which contains policies and committee charters
 - The strategic plan
 - A sample Board packet
 - A copy of the Bagley-Keene Open Meeting Act
 - Copies of Board and committee meeting minutes for the past six months
 - A list of upcoming recommended educational conferences
 - Any other relevant information or documents deemed appropriate by the CEO

4. Mentoring

Any new Board Member may request a mentor to assist him or her in becoming familiar with his or her responsibilities on the Board. If a request is made, the Board Chair will designate one experienced Board Member to be a mentor to the new Board Member for a period of one year. The mentor will contact the new Board Member at least once each calendar quarter, outside of regularly scheduled Board meetings, for consultation or discussion related to new Board Member orientation.

5. Ongoing Board Member Education

- Educational Conferences. The CEO will maintain a list of educational conferences appropriate for Board Members and Board Members may attend any of these conferences subject to the Board's travel expense policy. The CEO will regularly update this list when new educational opportunities arise. The list will also be modified to reflect the evaluations from Board Members who have attended specific conferences to ensure that the conferences remain worthy of the Board's time and the System's expense. In considering out-of-state educational opportunities, Board Members should weigh the costs and benefits of travel versus locally based education.
- In-House Education Sessions. Based on the personal education needs of the Board Members, the CEO will arrange for staff or outside service providers to conduct educational sessions throughout the year at regularly scheduled Board meetings or off-sites.
- Bi-Annual Board Education. Within every two (2) years of service on the Board, all Board Members are required to complete 24 hours of Continuing Education to aid in the performance of their duties. The new member orientation, fiduciary education session, state ethics training, Bagley-Keene training and other regularly scheduled or required training may be credited toward the 24 hour requirement. New Board Members are encouraged to attend at least one educational session or conference designed to give them a general understanding of the responsibilities of a public retirement system fiduciary. Continuing Board Members are encouraged to attend at least one educational session or conference designed to help them become proficient in performing their duties on Board committees.
- Evaluation Form. Board Members must complete an Education Evaluation form upon completion of any educational conference and such form must be turned in with any request for reimbursement of expenses associated with the conference. A reimbursement will not be made without a completed Education Evaluation form.
- Compliance Reporting. Board Members are responsible to track their continuing education and furnish an attestation of completion of the requirements of this section upon request.

6. Fiduciary Education Session

Each year the General Counsel will arrange for a fiduciary education session that will update the Board Members on issues affecting their service on the Board. Board Members and their designated representatives are expected to attend.

7. State Ethics Training

Every two years, Board Members are required to complete an ethics training course. The on-line course developed by the California Attorney General's Office and the Fair Political Practices Commission may be used to satisfy this requirement.

8. Retirement Industry Periodicals

Board Members are encouraged to subscribe to periodicals selected from a list of pension and investment-related periodicals maintained by the CEO. The expense for the periodicals will be paid by the System. The CEO will annually review and update this list with input from the Board Members.

Amended April 6, 2005

Amended April 3, 2008

Amended April 1, 2015

b. Travel Expense Policy

1. Purpose

As fiduciaries, the Board members must ensure that only reasonable and necessary expenses are incurred in the governance and management of the System. This is accomplished through the annual operating budget, which the staff proposes, the Board approves, and both monitor on a regular basis. In addition to the budget, the Board has adopted this Travel Expense Policy to provide more detail about the parameters for Board travel.

2. Required Travel

Travel is required to attend any publicly noticed meeting or offsite of the CalSTRS Board. Public notice of a Board meeting serves as automatic prior approval of any Board member or staff travel necessary to attend the meeting.

At times travel is also required to conduct specific business or to attend a specific event and represent the System in an official capacity. No prior approval is necessary for this type of travel.

3. Travel Related to Board Education

Travel may be required to attend seminars, conferences or educational classes as set forth in the Board's Educational Policy.

A budget for travel expenses (transportation, per diems, lodging) will be established within the annual operating budget to cover reimbursement of travel expenses incurred in meeting educational goals as set forth in the Board's Educational Policy. The Board chair will be responsible for annually reviewing the budget, updating the members as to the status of the budget and making any changes to the budget thereafter.

Expenses are reimbursable under the System's fiscal requirements and must be disclosed and reported pursuant to those requirements. Additionally, before reimbursement can be made, Board members must submit an Education Evaluation form relating to the specific seminar, conference, or education class they attended.

The CEO shall review all Board education related travel requests to ensure they are compliant with this policy. All requests shall be placed on the Board consent agenda but may be removed for a full discussion at the request of any board member. Emergency travel requests may be reviewed and approved by the Board Chair if timing prevents calendaring the request in time for a scheduled Board meeting.

4. Reimbursement for Travel Expenses

CalSTRS shall pay for reasonable travel expenses in accordance with State regulations and guidelines, including actual transportation and related lodging and subsistence. While traveling, Board members and staff may accept meals provided by third parties, subject to the threshold reporting requirements of the FPPC. In these situations, per diem reimbursement for such meals cannot be claimed.

Submission of claims for reimbursement for all travel expenses shall be made on a timely basis but no later than the close of the fiscal year or as soon thereafter as reasonably possible and shall be accompanied by receipts. Claims for reimbursement shall be submitted on the form then in use by CalSTRS and presented to the board secretary (CEO).

In situations where third parties offer payments, advances, or reimbursements for travel, including actual transportation and related lodging and subsistence, to CalSTRS Board members or staff, the acceptance of such payments will be handled on a case-by-case basis and in accordance with applicable political reform laws and regulations. For Board members, prior approval must be given by the full Board. For the CEO, prior approval must be given by the Board Chairman or designee. For other staff, approval must be given by the CEO.

5. Travel Activity Summary

A summary of all Board and Executive Staff out-of-state/international travel shall be compiled and provided to the full Board semi-annually. The summary shall itemize the source of funding for the travel (privately funded, CalSTRS reimbursed, gift to CalSTRS, other) and briefly describe the purpose of the travel.

6. Additional Disclosure Requirements

All CalSTRS Board members and staff are subject to the disclosure and reporting requirements of the System's Conflict of Interest Code (COI) and political reform laws and regulations. Any Board Member or staff member who receives a gift of travel expenses (paid or reimbursed) or the actual transportation and related lodging and subsistence from any third party other than either the System or the State of California has the responsibility to obtain prior approval pursuant to paragraph 4 to ensure compliance with applicable laws and rules.

Absent compliance with political reform laws and rules, receipt of actual transportation and related lodging and subsistence or any payment or reimbursement of the same to Board members or Staff regarding travel of any kind by third parties may subject the recipient to disqualification from participation in making decisions related to the third party. It is the recipient's responsibility to ensure that he or she does not engage in any action that places him or her in a conflict of interest. Board members and staff are encouraged to confer with the General Counsel of CalSTRS if they have questions concerning possible conflicts of interest.

Amended April 6, 2005

Amended April 3, 2008

c. Strategic Planning Policy

1. Guiding Principles

CalSTRS strategic plan represents a continuous five year effort of instilling best corporate practices today in order to successfully accomplish its vision tomorrow. The plan is a cooperative effort between CalSTRS board and staff and is updated annually. With direction from the board, the plan is implemented by staff and used throughout all levels of CalSTRS. The strategic plan guides the board and committees in the development of work plan activities.

2. The roles and responsibilities for strategic planning are outlined below.

Members of the board are responsible for:

- Reaching consensus and adopting the initial strategic plan for CalSTRS, including the Vision, Mission, Core Values, Goals and Objectives

- Identifying the critical success factors for the overall plan
- Approving the method for performance measurement, including metrics and benchmarks, in order to evaluate progress under the strategic plan
- Ensuring availability of the resources to implement strategic planning objectives and addressing obstacles that may impede progress of the plan
- Establishing a process for providing direction to staff on the plan
- Managing priorities in accordance with the strategic plan
- Participating in an environmental scan to update the strategic plan using appropriate strategic planning methods
- Evaluating progress in meeting goals and objectives
- Updating the plan annually

The Chief Executive Officer is responsible for:

- Seeking input from staff and stakeholders about key strategic issues, including an environmental scan, prior to the annual planning session
- Coordinating with the board chair so that the board and staff work together to review and update the goals and objectives
- Developing operational strategies that align with the board's priorities and managing staff's implementation of the plan
- Working with staff to develop a business plan that aligns with the strategic plan
- Monitoring implementation and progress under the plan and promptly informing the board of any obstacles impeding progress
- Preparing annual progress reports for the board
- Informing the board of any issues that should be dealt with in the strategic plan
- Communicating plan updates to staff and other stakeholders

Definitions

1. Benchmarking - Benchmarking is a process of rating CalSTRS practices, processes and products against peer groups or best-in-class performers. Benchmarks are then derived by comparing the quality of CalSTRS practices, processes and products against standard measurements, or similar measurements. The objectives of benchmarking are (1) to analyze how other organizations achieve their high performance levels, (2) to determine whether or not the information applies to CalSTRS, (3) to apply this information to improve performance.
2. CalSTRS Business Plan - An annual plan prepared by CalSTRS staff to detail objectives aligned to the Strategic Plan for the next fiscal year. The Business Plan illustrates how the objectives will be achieved and serves as a blueprint to guide CalSTRS activities for the year. It also provides a summary of the total annual budget and a break down of personnel allocations by business area.
3. Environmental Scan - Careful monitoring of CalSTRS internal and external environments to detect opportunities and threats that may influence its ability to implement current and future plans.
4. Goal - A long-term organizational target or development direction. It states what the organization wants to accomplish or become over the next several years. Goals provide a basis for decisions about the nature, scope and relative priorities of all objectives, projects and activities. Everything the organization does should help it move toward attainment of one or more goals.
5. Mission - The purpose of CalSTRS, its unique reason for existence. It identifies *who* it is, *what it does*, *for whom* it provides the services or products, and *why* it exists.
6. Objective - Action-oriented statements to achieve goals. Objective statements are specific, measurable, action-oriented, realistic and time-bound (SMART). Objectives often begin with action verbs such as “increase,” “reduce,” “improve” or “achieve.”
7. Performance Measure - A standard used to evaluate performance against expected results. Measures can be quantitative (numbers, dollars, percentages, etc.) or qualitative, with success defined for evaluating progress. Reporting and monitoring measures help an organization gauge progress toward effective achievement of strategic goals.
8. Strategic Plan - A document used by CalSTRS to align its organizational strategies and resources with its mission, vision and priorities. The Strategic Plan includes a mission and vision statement, core values, a description of the CalSTRS long-term goals and objectives, outcome measures and strategies or means that the organization plans to use to achieve the goals and objectives. The Strategic Plan also includes an updated assessment of internal strengths and weaknesses, and external opportunities and threats that could have an influence over achievement of the goals and objectives (environmental scan).

9. Strategy - The means by which an organization intends to accomplish a goal or objective. It summarizes a pattern across policy, programs, projects, decisions and resource allocations.

10. SWOT Analysis - A type of organizational environmental scan in which internal strengths and weaknesses and external opportunities and threats are closely examined to better understand the environment in which CalSTRS is operating. Results are frequently used as input to strategic planning sessions to determine if strategic course corrections are necessary. SWOT is an acronym for strengths, weaknesses, opportunities and threats.

11. Vision - A vision is a conceptual image of a desired future for CalSTRS. It focuses on expressing the future in such a way as to excite and compel CalSTRS to attain its future state. It is the foundation for a strategic management system.

12. Work Plan - Completed annually, states board and committee activities for the upcoming fiscal year that are aligned to the strategic plan. Documents when these activities will be presented to the board/committee and how the activities relate to strategic goals, objectives and CalSTRS vision.

Approved April 1, 2008

Amended November, 3, 2011 to clarify roles and responsibilities among the board and the Chief Executive Officer, and add strategic planning definitions to establish a common understanding of terms used throughout the process.

d. Hearings on the Record by the Appeals Committee

APPLICABILITY

This policy applies to hearings before the Committee where it has rejected or seeks to modify the Proposed Decision rendered by an Administrative Law Judge (ALJ) and has decided to hear the matter itself on the written record and has further decided to take additional evidence.

SCOPE OF REVIEW

In many instances the Committee limits its review to the administrative record of the hearing before the ALJ. However, in those instances where the Committee has decided to consider the taking of additional evidence, the Committee will confine this evidence to newly discovered documentary evidence which could not, with reasonable diligence, have been discovered and produced at the hearing.

EVIDENCE

If the Committee has made the decision to take additional evidence, the parties shall exchange such evidence and lodge a copy with the Secretary of the Board no later than 10 business days prior to the date of the meeting of the Committee at which the matter will be considered. Such evidence shall be accompanied by a complete, clear, and legible copy of any such documentary evidence and a statement which shows:

1. Good cause exists as to why the evidence could not, with reasonable diligence, have been discovered and produced at the original administrative hearing;
2. The evidence to be introduced is relevant to the resolution of some material issue in the administrative appeal; and
3. The evidence is admissible and relevant to the matters at issue.

The Committee will determine at the time of its meeting, whether the new evidence will be considered.

PROCEDURE FOR HEARINGS BEFORE THE COMMITTEE

1. In accordance with the Bagley Keene Open Meeting Act, all administrative appeal hearings on the record will be held in Open Session.
2. Respondent, having the burden of proof, will present his or her argument first. Each named Respondent, if more than one is involved in an appeal, will be allowed 15 minutes to present his/her argument. The Staff Counsel representing CalSTRS will then have 15 minutes to present the organization's position.

3. Each side shall, thereafter, have 10 minutes for rebuttal, which shall be strictly confined to rebutting the opposition's previously asserted arguments.
4. Thereafter, the Committee may move into Closed/Executive Session for deliberation. The Committee Chairperson will announce the decision upon returning to open session.
5. A final administrative decision/order will be prepared and served by certified mail on Respondent(s).

Adopted February 4, 2009

e. Board Compensation and Reimbursement of Employers

The law recognizes that Board members who are members of the Defined Benefit Program and participants of the Cash Balance Benefit Program must have "sufficient time away from regular duties, without loss of compensation or other benefits to which the member would be entitled by reason of employment, to attend meetings of the board or any of its committees or subcommittees of which the person is a member, or to serve as a member of a panel of the system, and to attend to the duties expected to be performed by the person." (Ed. Code, sec. 22224.) Employers of these members must be reimbursed from the retirement fund for the cost incurred by employing a replacement. The Board has approved the following alternative measures for the reimbursement of school and community college districts that employ educator Board members:

- Up to 80 percent of the employment contract for educator Board members.

The Board shall approve in advance the reimbursement percentage at the first regular meeting after the meeting at which committee chairs are named.

*Amended June 1, 2005
Amended April 2, 2009
Amended July 11, 2011
Amended July 13, 2017
Amended February 8, 2018*

E. Meetings

a. Notice of Meetings

The Board shall comply with the provisions of the Bagley-Keene Open Meeting Act (Gov. Code, sec. 11120 et. seq, hereinafter “Bagley-Keene Act”). Any gathering of a quorum of this Board or a committee thereof where business is to be transacted or discussed shall be noticed pursuant to the provisions of the Bagley-Keene Act. This requirement does not apply to informal gatherings such as conferences and social activities provided that no official business is discussed. The regular Board and Committee meeting schedule is prepared by staff and approved by the Board on a calendar year basis. Regular meetings of the Board or its Committees require 10 days notice under the Bagley-Keene Act. Other, shorter notice requirements may be applicable in special situations under the Act.

Amended June 9, 2005

Amended April 3, 2008

b. Administration of Meetings

1. In the absence of specific Board policy the procedural conduct of Board and committee meetings is committed to the sound discretion of the Chair using Robert’s Rules of Order as a procedural reference.
2. The concurrence of the majority of the members present shall be necessary for the Board or one of its committees to take an action.
3. The quorum of the Board or one of its committees shall consist of the majority of its members. In determining whether a quorum is present, vacant positions on the committee or Board shall not be considered. A Board or committee member is “present” for purposes of calculating the necessary number of votes for an action when that member is physically present in the meeting room or on the phone if participating via teleconference.
4. Meetings may be conducted by teleconference in accordance with the provisions of the Bagley-Keene Act. As mandated by the Act, all votes during a teleconferenced meeting shall be by roll call.
5. The Board or a Committee Chair may make a motion for an action to be taken by the Committee, although the preferred practice is for the Chair to first entertain a motion from another member before proceeding to make a motion.
6. In the absence of the Chair, the Vice-chair shall assume all responsibilities and authority of the Chair.

7. If, during the course of a meeting, it comes to the attention of the Chair that a member is apparently temporarily absent from the meeting, the Chair may in his or her own discretion and without benefit of a motion cause the meeting to be recessed until the member returns or such other time that the Chair is satisfied that the meeting may continue.

Amended April 6, 2005
Amended November 3, 2006
Amended April 3, 2008

c. Closed Session Policy

The Board shall limit the business it conducts in closed session to those matters specifically authorized by the Bagley-Keene Act. Pursuant to the Act, matters properly considered in closed session include the following:

1. The appointment, employment, evaluation of performance, or dismissal of a public employee.
2. Matters pertaining to the recruitment, appointment, employment, or removal of the Chief Executive Officer or pertaining to the recruitment or removal of the Chief Investment Officer.
3. To deliberate on proposed decisions relating to benefit appeals.
4. To confer with, or receive advice from, legal counsel regarding pending litigation, when discussion in open session concerning those matters would prejudice the position of the Board in the litigation.
5. To consider investment decisions.

With regard to investment decisions, the Board shall consider most investment matters in open session unless such consideration would jeopardize execution of the investment or cause harm to the economic value of the investment. Investment decisions which are made in the closed session shall be made by roll call. The roll call vote shall be entered into the closed session minutes of the meeting. The Board shall endeavor to release the roll call vote to the public once the transaction is closed, or sooner if it is determined the investment will not be harmed by such release.

Closed sessions of the Board and its committees shall be limited to Board members and only those other persons who are required by the Board.

Amended April 6, 2005
Amended April 3, 2008

d. Agendas

1. All agenda items shall be identified initially as either action items or informational items. Items designated for information are appropriate for action if the Board or Committee wishes to take action. A notation to that effect shall be made on the agenda. The Board Chair or Committee Chair is responsible for time management of the applicable body.
2. Both information items and action items can be designated as consent items. All consent items will appear together as the first items on the Board or committee agenda and may be adopted together following a motion to approve the consent agenda that is seconded and then passed by majority vote. Any member of the Board or Committee may ask that a matter be removed from the consent agenda and that request shall be effective without further action. If a matter is removed from the consent agenda it shall be discussed at a point in the meeting deemed appropriate by the Board/Committee Chair. There shall be no discussion or presentations made concerning items that remain on the consent agenda.
3. All items on Board and Committee agendas shall be supported by concise, easily accessible information.
4. All Board members shall receive in advance of any meeting copies of all Committee agendas and supporting information.
5. Following each Committee meeting, the Committee Chair, in consultation with staff, will prepare a brief summary of Committee actions to be presented to Board members in a report to be given at the open or closed session of the Board meeting as appropriate.
6. At each meeting of the Board or one of its Committees, a draft agenda for the next meeting of the Board or committee will be submitted for discussion. Any requested changes shall be made to the committee chair, who shall be responsible for the final agenda.

*Amended June 9, 2006
Amended April 3, 2008*

e. Minutes

The Board or Committee chair of a meeting shall have an opportunity to review the minutes prior to distribution to other Board members and preferably within three weeks following the meeting. The minutes will reflect the deliberative discussions of the board and its committees, the decisions reached, and the action taken.

Amended June 9, 2006

F. Risk Management Policy

CalSTRS considers risk management an essential component of strategic, operational, financial, and reputational management. CalSTRS faces a range of risks that can both positively (opportunities) and negatively (threats) impact the achievement of business objectives. The focus of CalSTRS risk management is the identification, assessment, and response to risks and the timely communication of the results of these processes. CalSTRS embeds risk management in all business practices to keep it relevant, effective, and efficient. In keeping with this approach, the board shall have the primary responsibility for CalSTRS enterprise-wide risk oversight, while board committees are chartered with oversight of specific areas of risks. To ensure CalSTRS is prepared for low-probability risks and long-term sustainability, the board shall establish CalSTRS:

- Risk oversight framework and reporting metrics.
- Commitment to periodic review and verification of this risk management policy.
- Risk appetite or aversion and rationale for managing risk.
- Accountabilities and responsibilities for managing risk.
- Approach to conflicting interests.

The Board is responsible for:

1. Ensuring creation of a comprehensive approach and framework to anticipate, identify, analyze, prioritize, and manage key risks to the System's business objectives.
2. Providing the policy for an effective system of enterprise-wide risk management.
3. Establishing the overall enterprise risk appetite.
4. Approving management's strategy relating to key risks, including, but not limited to, strategic, operational, financial, compliance, reputational and investments.
5. Receiving reports on selected risk topics from time to time.
6. Ensuring risk assessments are performed periodically and completely.
7. Confirming board committees are overseeing the adoption of appropriate processes, methods, and tools for managing risks associated with business objectives in the committee's domain.
8. Communicating risk management activities and risk appetite established by the board.

The Chief Executive Officer is responsible for:

1. Creating the risk governance structure, risk assessment and risk management practices, and the guidelines, policies, and processes for risk assessment and risk management based on the board policy and framework.
2. Ensuring management establishes a strategy relating to key risks, including, but not limited to, strategic, operational, financial, compliance, reputational and investments.
3. Instilling an awareness of risk and creating a responsibility for effective risk management at all levels within CalSTRS.
4. Establishing the methodology for measuring risk management performance.
5. Periodically conducting and reporting the results of risk assessments.

Adopted February 6, 2014

Amended April 2, 2014 the provisions relating to the conduct of meetings to be reorganized under headings reflecting the overall purpose of these provisions.

G. Self-Evaluation Policy

Purpose

Best practices of public retirement boards of trustees and corporate boards of directors are to set aside time on a regular basis to candidly discuss the boards' performance and make continuous improvements in board governance. The CalSTRS board will follow this practice and engage in a self-evaluation to assess how well the board is functioning in carrying out its fiduciary and statutory responsibilities and to continually refine its governance practices.

Responsibility

The Chair and Vice-Chair of the board are jointly responsible for implementing this policy. They will decide upon the method and criteria to be used to evaluate the board's performance and may seek advice and assistance from the board's governance consultant, as necessary. All trustees are responsible for taking part in the self-evaluation.

Method

The method used for the board self-evaluation will be a preliminary and integral step in the board's evaluation of the CEO and CIO. Therefore, any written materials and discussions will be considered confidential pursuant to the personnel exceptions to the open meetings and public records laws.

A formal evaluation survey will be used at least every other year. The survey will list pertinent evaluation criteria and use a simple rating scale. The criteria are meant to be a guide and need not be followed exactly. In addition to surveying the board members, the Chair and Vice-chair may seek input from the staff, outside services providers and others, at their option. An independent third party such as the governance consultant will distribute the surveys, tabulate the ratings and summarize the comments without attribution, facilitate the board's discussion of the survey outcomes, and make recommendations for improvements.

In the years when a formal evaluation survey is not used, the board will still set aside time to discuss its performance before undertaking the evaluations of the CEO and CIO. This way the board self-evaluations will take place every year, either formally or informally.

Action Steps

A summary of the discussions and next steps will be produced by the governance consultant or whomever the board Chair and Vice-Chair so designates. Any changes to policies and procedures will be discussed and made in open session at a future board meeting.

Evaluation Criteria

Self-evaluation criteria may address, among other board operation topics, allocation of time for board and committee meetings, the board's role in policy-making and oversight, meeting conduct, board and staff communication, board and consultant communication, ethical practices and fiduciary responsibility.

Adopted November 6, 2014

H. Policy Review

The policies contained in the Teachers' Retirement Board Policy Manual will be reviewed at least once every three years or more often as necessary. The type and date of any policy revision shall be noted in italics immediately following the revised policy.

Adopted June 8, 2017

I. Consultant Evaluation Policy

Purpose

Consultants play a key role in assisting the Board in fulfilling its governance and oversight of CalSTRS. The Board retains consultants ("Board Consultants") to provide independent information and advice to the Board or its Committees on strategic and policy issues. It is essential that Board Consultants be routinely evaluated during their contract terms because of their high impact on CalSTRS strategy and management matters.

The Board shall follow this practice to periodically assess the performance of Board

Consultants and continually optimize the value of the services provided to CalSTRS. This practice shall be the preferred approach for the Board and its Committees to deliver consensus performance feedback to Board Consultants, and shall be undertaken in lieu of individual Trustee participation in any Board Consultant-administered survey.

Responsibility

The Board Chair and Vice-Chair are jointly responsible for implementing this policy. All Trustees are responsible for participating in the evaluation of consultants that advise the full Board. Only those Trustees that serve on a particular Committee are responsible for participating in the evaluation of that Committee's consultants. The Board Chair and Vice-Chair, or applicable Committee Chair and Vice-Chair ("Board Leadership"), are responsible for communicating the results of the process to those Board Consultants evaluated.

An independent third party, such as the Board's governance consultant or whomever the Board Chair and Vice-Chair so designate, may be used to assist in the design and implementation of the process.

Process

The Board Chair and Vice-Chair shall determine the evaluation elements and techniques. The primary elements of the process may include the following: developing preliminary feedback, facilitating Board or Committee discussion, and conducting individual performance discussions with the Board Consultants to communicate the evaluation results.

Developing Preliminary Feedback

One or more techniques may be utilized to obtain preliminary feedback regarding a Board Consultant's performance concerning the CalSTRS relationship, including:

- Administering a written or verbal survey of individual Trustees;
- Requesting a written or verbal self-assessment from the Board Consultant; and
- Conducting a written or verbal survey of executive staff.

Preliminary feedback will be provided to all Board or Committee members in advance of the evaluation discussion.

Facilitating Board or Committee Discussion

The Board Leadership may request that the principal Board Consultant orally present his or her self-assessment narrative to the Board or respective Committee, and respond to questions as part of the evaluation discussion. The Board or Committee shall strive to develop performance messages that reflect the consensus view of those Trustees conducting the evaluation.

Conducting Individual Performance Discussions

The Board Leadership shall timely deliver the results of the evaluation through an individual performance discussion with the principal Board Consultant.

Evaluation Criteria

General criteria for the process may address, among other topics, sufficiency of a Board Consultant's knowledge, timeliness, responsiveness, professionalism, verbal and written communications, quality of work product, and quality of interaction with the Board, its Committees, and staff.

Timing

The Board shall annually review its Board Consultant roster and prospectively set the schedule for evaluation. Board Consultants shall be evaluated at approximately the mid-point of their contract term. Those Board Consultants with contract terms longer than five years shall be evaluated at approximately every third year of their contract term. Notwithstanding, the Board may elect to evaluate any Board Consultant at any time during the contract term.

At the election of the Board Leadership, Board Consultants may be selected to participate in this process at the outset of their contract term to facilitate effective onboarding. Under this scenario, the purpose of the evaluation discussion shall be to convey forward-looking expectations to the Board Consultant concerning the working relationship preferred by the Board or applicable Committee, including frequency and type of communications.

J. Routine Reports Policy

This Routine Reports Policy sets forth the expectations of the Teachers' Retirement Board regarding the specific reports, both verbal and written, it is to receive from CalSTRS staff and external providers on an ongoing basis. The routine reports support the board in its actions to comply with the law, perform effective oversight, and address its fiduciary responsibilities under a range of topics including, but not limited to:

- Governance;
- Funding and Valuations;
- Investments;
- Benefits Administration and Services;
- Operations, Audit and Finance;
- Ethics and Compliance; and
- Legal and Legislative Affairs.

The CEO is responsible for implementing and ensuring compliance with this policy and for transmitting reports mandated by the State to the parties required under law. The CEO will work continuously with staff and external consultants and advisors to improve the format and content of routine reports to ensure they meet the needs of the board, provide adequate and timely information and are understandable. The listing of routine reports will be available on the board website with updates to the report listing administered by

the Executive Office as needed. The Executive Office will provide notification to the board of actual or proposed changes to the report listing. Additionally, the board may make revisions to the report listing periodically as needed.

K. Charters

The following charters are attached:

1. Appeals Committee
2. Audits and Risk Management Committee
3. Benefits and Services Committee
4. Board Governance Committee
5. Compensation Committee
6. Investment Committee

TEACHERS' RETIREMENT BOARD

APPEALS COMMITTEE CHARTER

INTRODUCTION

The Appeals Committee has been established in order to provide a dedicated body to hear, deliberate upon, and decide appeals of system determinations pursuant to the Administrative Procedure Act.

AUTHORITY

1. To hear and act finally on all appeals, proposed decisions, and determinations of whether an administrative hearing will be granted pursuant to the applicable provisions of the Education Code and California Code of Regulations. However, at the request of the Board Chair, any appeal may be removed from the Committee prior to being heard, and be brought before the Board for determination.
2. To designate all or a part of an administratively adjudicated decision as a Precedential Decision pursuant to the Board Policy 800 D and Government Code section 11425.60.
3. To engage professional services consultants for the purpose of providing relevant training to members of the Committee.

COMPOSITION

The Committee shall consist of five members.

MEETINGS

The Committee shall meet on an as-needed basis to ensure the timely resolution of appeals, as determined by the Committee Chair, the Assistant General Counsel, and the Benefits and Services Executive Officer. The Committee may hold meetings on dates other than regular Board/Committee meeting dates to facilitate both the expeditious resolution of appeals and the efficient conduct of regularly scheduled meetings.

RESPONSIBILITIES

The Committee's responsibilities include the following:

1. To hear, deliberate upon, and expeditiously decide appeals of system determinations pursuant to the Administrative Procedure Act.
2. To hear, deliberate upon, and expeditiously decide to designate all or part of an administratively adjudicated decision as a Precedential Decision pursuant to the Board Policy on Designating Precedential Decisions and Government Code section 11425.60.
3. To work with CalSTRS staff to identify training opportunities.
4. To adhere to the Risk Management Policy established by the board.

5. To review emerging and significant risks specific to the area of responsibility of the Appeals Committee and to report those risks to the board.

Approved September 6, 2006

Amended June 3, 2009

Amended April 10, 2013

Amended to delineate Board and Committee responsibility in the oversight of risk on

February 6, 2014

Amended May 10, 2018

TEACHERS' RETIREMENT BOARD

AUDITS AND RISK MANAGEMENT COMMITTEE CHARTER

INTRODUCTION

The Audits and Risk Management Committee has been established to assist the Teachers' Retirement Board in fulfilling its fiduciary oversight responsibilities for the:

Financial Reporting,
Risk Management,
Internal Control,
Compliance,
Internal Audit,
External Audit of the Financial Statements, and
Engagements with Other External Firms.

AUTHORITY

1. Appoint, provide for the compensation of, and oversee the work of the independent certified public accounting firm employed by CalSTRS to audit the financial statements.
2. Retain and oversee consultants, experts, independent counsel, and accountants to advise the committee on any of its responsibilities or assist in the conduct of an investigation.
3. Request and provide oversight of audit and investigation activities of financial, ethical, and/or fraud matters.
4. All committee actions must be ratified or adopted by the board to be effective.

COMPOSITION

The committee shall be composed of a minimum of three (3) members, appointed by the chair of the of the board.

MEETINGS

The committee will meet at least four times a year, with authority to convene additional meetings as determined by the committee chair in consultation with the board chair.

RESPONSIBILITIES

The committee shall have responsibility for the following:

1. Designating at least one member as the "audit committee financial expert," as defined by the Securities and Exchange Commission (SEC). The member's knowledge should include an understanding of generally accepted accounting principles for public pension funds issued

by the Governmental Accounting Standards Board. If a financial expert is not available on the committee, an experienced professional will be selected possessing the qualities listed in the SEC's "Audit Committee Financial Expert" definition. Candidates for this non-voting position will be recommended by Audit Services and CalSTRS executive management and approved by the committee.

2. Reviewing the external auditors' proposed audit scope and approach, including the coordination efforts with management and internal audits.
3. Overseeing the reporting and integrity of all financial information reporting.
4. Reviewing and recommending to the board changes, when necessary, to enterprise-wide risk management processes, governance, and related policies or infrastructure.
5. Adhering to the Risk Management Policy established by the board.
6. Reviewing emerging and significant risks specific to the area of responsibility of the committee, and reporting those risks to the board.
7. Overseeing the assessment of internal administrative and accounting controls by both the external independent financial statement auditor and internal auditors.
8. Ensuring management maintains an effective system of internal controls and provides the mechanisms for periodic assessment of the system of internal controls.
9. Overseeing the design and implementation of the Compliance Program, including the policies and procedures to help prevent and detect violations of law and to promote business ethics.
10. Overseeing CalSTRS' policies and procedures for the receipt and handling of allegations of suspected misconduct, and receiving reports from the Chief Compliance Officer or other appropriate personnel on a periodic and as-needed basis regarding significant reports received.
11. Overseeing the appointment and work of the chief auditor and the work of Audit Services.
12. Approving the Internal Audit Charter. Review with the Chief Auditor the internal audit budget, resource plan, activities, and organizational structure of the internal audit function.

13. Approving the annual audit plan and all major changes to the plan. Reviewing the internal audit activity's performance relative to its plan.
14. Reviewing the effectiveness of the internal audit function through a periodic quality assurance review as required by the Standards.
15. Serving as the primary liaison and providing the appropriate forum for handling all matters related to audits, examinations, investigations, or inquiries of the California State Auditor and other appropriate State or Federal agencies.
16. Ensuring the independence of the external auditor and approving all auditing and other attestation services. Pre-approving non-audit services performed by an external audit firm.
17. Reporting to the board on all activities, findings, and recommendations of the committee.
18. Periodically assess the committee's effectiveness.

Amended February 7, 2007

Revised April 1, 2009

Revised February 5, 2014

Amended to delineate Board and Committee responsibility in the oversight of risk on

February 6, 2014

Revised September 15, 2016

TEACHERS' RETIREMENT BOARD

BENEFITS AND SERVICES COMMITTEE CHARTER

INTRODUCTION

The Benefits and Services Committee has been established to develop and oversee the execution of prudent policies relating to levels of benefits and the delivery of services to CalSTRS members, retirees and beneficiaries.

AUTHORITY

1. To direct staff to undertake research on issues related to the benefits and services provided to CalSTRS members and beneficiaries and, if necessary, form task forces with representation from affected stakeholders.
2. To engage professional services consultants as necessary to assist the Committee in fulfilling its responsibilities.

COMPOSITION

The Committee shall be composed of a minimum of three (3) members appointed by the Chairperson of the Board. The composition of the Committee membership shall reflect the diversity of public, ex-officio and elected members on the Board

Each Committee member, within a year of appointment, will achieve reasonable proficiency in the System's benefit structure and have an understanding of employee benefit structures in general.

MEETINGS

The Committee will generally meet at each regularly scheduled Board meeting and otherwise on an as-needed basis as determined by the Committee Chair in consultation with the Chair of the Board.

RESPONSIBILITIES

The Benefits and Services Committee shall have responsibility for the following:

1. To monitor and recommend to the Board all other actions with respect to benefits including levels of service and member communications
2. To review and recommend to the Board all other actions with respect to the design, financing and administration of the System's benefits structure.
3. To review and recommend to the Board all actions with respect to interest and contribution rates as well as lump sum death benefit amounts established by the Board pursuant to the Education Code for the State Teachers' Retirement Plan.

4. To maintain and increase proficiency in the benefit structure, Committee members are encouraged to make annual on-site visits to the Customer Contact Center and attend informational presentations to CalSTRS members.
5. To adhere to the Risk Management Policy established by the board.
6. To review emerging and significant risks specific to the area of responsibility of the Benefits and Services Committee and to report those risks to the board.

Amended September 8, 2005

Amended April 2, 2009

*Amended to delineate Board and Committee responsibility in the oversight of risk on
February 6, 2014*

TEACHERS' RETIREMENT BOARD

BOARD GOVERNANCE COMMITTEE CHARTER

INTRODUCTION

The Board Governance Committee has been established to support the CalSTRS Board in promoting the best interests of CalSTRS, its members, retirees and beneficiaries through the implementation of sound Board governance policies and practices that enhance good, fair and open decision making.

AUTHORITY

To engage professional services consultants and counsel as necessary to assist the Board in its strategic planning and governance activities. All Committee actions must be ratified or adopted by the Board.

COMPOSITION

The Committee shall consist of at least five (5) members.

MEETINGS

The Committee shall meet on an as-needed basis as determined by the Committee Chair in consultation with the Board Chair.

RESPONSIBILITIES

The Board Governance Committee shall have the authority and responsibility for the following:

1. To oversee the Board's policy manual by developing processes to ensure policies are current and that CalSTRS' actions are compliant with such policies.
2. To review and make recommendations to the Board for the format and organization of the Board's policies, and the content of Section 500 (Board Governance), Section 600 (Ethical and Fiduciary Conduct) and Section 700 (Compensation Policy) of the Board's policies.
3. To review the overall effectiveness of the Board and recommend improvements where warranted.
4. To recommend changes in the structure of the Board meetings and the preparation of materials and records of Board actions.
5. To oversee and facilitate educational opportunities for board members.
6. To recommend the roles and responsibilities of the various committees of the Board.
7. To oversee the process for the election of those board members elected by members.
8. To review and recommend to the Board the Delegation of Authority to the Chief Executive Officer.
9. To identify the need for and to recommend to the Board positions on proposed legislation relating to Board governance.
10. To adhere to the Risk Management Policy established by the board.
11. To review emerging and significant risks specific to the area of responsibility of the Board Governance Committee and to report those risks to the board.

Adopted April 6, 2005

Amended April 2, 2009

Amended to delineate Board and Committee responsibility in the oversight of risk on

February 6, 2014

*Amended responsibilities to include reviewing and making recommendations to the Board for
format and organization changes to the Board Policy Manual on November 6, 2014*

*Revised Item Number 2 of the Responsibilities changing the wording from Section 700
(Administration) to read Section 700 (Compensation Policy) on June 10, 2015*

Revised Item Number 5 regarding trustee education on February 7, 2018

TEACHERS' RETIREMENT BOARD

COMPENSATION COMMITTEE CHARTER

INTRODUCTION

The Compensation Committee has been established to provide oversight to the System's compensation policies and plan that support the successful recruitment, development and retention of talent to meet the business objectives of CalSTRS.

AUTHORITY

To provide oversight to the System's compensation strategy and operation of the plan.

To develop recommendations for the Board related to the System's compensation plan and policies necessary for effectively administering the compensation plan.

To engage professional services consultants and counsel as necessary to assist the Committee in fulfilling its responsibilities. The Committee has the sole authority to select, retain and terminate a compensation consultant and approve the consultant's fees.

COMPOSITION

The Committee shall be composed of a minimum of three (3) members appointed by the Chairperson of the Board.

MEETINGS

The Committee will meet on an as-needed basis as determined by the Committee Chair in consultation with the Chair of the Board but no less than once per year.

RESPONSIBILITIES

The Compensation Committee shall have responsibility for the following:

1. Ensure that the compensation program is properly designed to support organizational objectives.
2. Develop for Board adoption written policies that document the compensation plan and its administration.
3. With the assistance of outside professional services, make a determination of the labor market benchmarks (select appropriate peer groups) that will be utilized to compare System personnel salaries.

4. With the assistance of outside professional services, conduct a periodic examination of the compensation structure to assess its competitiveness and make recommendations for any adjustments.
5. Conduct periodic reviews of the Board's annual evaluation processes for the Chief Executive Officer and Chief Investment Officer to determine if any modifications are necessary.
6. Review relevant human resource policies that might hinder the System's ability to attract talented employees and make recommendation for change.
7. Determine the components (base and incentive) of the total compensation and their respective measures.
8. Periodically review and make recommendations for modifying the criteria that are used for incentive awards to ensure that the performance measures are still relevant and effective.
9. Periodically review labor market data on the System's employees to assess the impact of the compensation plan on the recruitment and retention of staff.
10. Oversee preparation of an organizational succession plan.
11. Adhere to the Risk Management Policy established by the board.
12. Review emerging and significant risks specific to the area of responsibility of the Compensation Committee and to report those risks to the board.

Approved November 3, 2005

Amended April 1, 2009

Amended to delineate Board and Committee responsibility in the oversight of risk on

February 6, 2014

TEACHERS' RETIREMENT BOARD
INVESTMENT COMMITTEE CHARTER

INTRODUCTION

The Investment Committee has been established by the Teachers' Retirement Board to administer all matters relating to the investment of the System's assets and investment management. The Committee is charged to administer the System's assets for the exclusive purpose of providing benefits to the participants and their beneficiaries within the System and to maximize the financial stability of the System in an efficient and cost effective manner. The Committee members will carry out their duties with the care, skill, prudence, and diligence of a prudent person acting in a similar institutional investment Board member capacity, and strive to follow sound policies and procedures that enhance good, fair, and open decision making.

The Committee's core objective is to diversify the investments of the State Teachers' Retirement Plan and the fund options of the Pension2 Defined Contribution assets, Pension2, so as to minimize the risk of loss and to maximize the rate of return, in accordance with the Board's overall objective of promoting the best interests for CalSTRS, its members, retirees, and beneficiaries.

AUTHORITY

To consider and act finally on all matters relating to the CalSTRS investment portfolios; to select and oversee the work of the Chief Investment Officer; and to engage investment advisors, consultants, managers and counsel as necessary to assist the Committee in carrying out its responsibilities. The Committee will not consider any proposed investment that has not gone through the System's due diligence process and been reviewed by the System's professional staff.

COMPOSITION

The Committee shall be composed of all Board members.

MEETINGS

The Committee will generally meet at each regularly scheduled Board meeting and otherwise on an as-needed basis as determined by the Committee Chair in consultation with the Chair of the Board.

RESPONSIBILITIES

The Investment Committee shall have responsibility for the following:

1. Determining the System's overall investment objectives for the various plans, risk tolerance and performance standards in accordance with the California Constitution and the Teachers' Retirement Law.
2. Determining the asset allocation of the State Teachers' Retirement Plan, including consideration of asset classes and sub-classes not currently utilized.

3. Determining the overall State Teachers' Retirement Plan Investment Policy and Management Plan as well as asset class and program investment policies.
4. Determining the menu of fund options for the Pension2 plans.
5. Monitoring the performance of the State Teachers' Retirement Plan investment portfolio as a whole as well as the performance of each asset class, including the performance of internal and external investment managers, and reviewing periodic reports from investment staff as well as external consultants, advisors, and investment managers.
6. Determining appropriate levels of staff delegation with respect to investment transactions in the various asset classes of the State Teachers' Retirement Plan and Pension2 plans.
7. Determining the relative amount of internal and external management for the State Teachers' Retirement Plan.
8. Monitoring the direct and indirect costs of all the investment programs and sub-sectors.
9. Determining and ensuring compliance with the appropriate reporting standards and time horizons.
10. Ensuring that all CalSTRS investments are made in conformance with applicable investment policies and investment resolutions.
11. Where warranted, monitoring to ensure compliance with CalSTRS investment policies for mitigating environmental, social and governance risks, ESG, and the System's corporate governance policies, in an effort to protect CalSTRS' assets through the pursuit of good governance and operational accountability.
12. Determining the procedures for the selection of the Chief Investment Officer.
13. To review emerging and significant risks specific to the area of responsibility of the Investment Committee and to report those risks to the Board.

Amended July 14, 2005

Amended to reflect reference to ESG Policy on April 2, 2009

Amended to reflect the full Corp Gov Committee and Legislation Committee on June 3, 2010

Amended to reincorporate Corporate Governance mandate on June 6, 2012

Amended to align the charter to the board's Risk Management Policy on February 6, 2014

Amended to reflect addition of the Pension2 program on April 3-4, 2014

600 ETHICAL AND FIDUCIARY CONDUCT

A. Education Code – Fiduciary Duties

The board and its officers and employees of the system shall discharge their duties with respect to the system and the plan solely in the interest of the members and beneficiaries as follows:

1. For the exclusive purpose of the following:
 - (a) Providing benefits to members and beneficiaries.
 - (b) Defraying reasonable expenses of administering the plan.
2. With the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with those matters would use in the conduct of an enterprise of a like character and with like aims.
3. By diversifying the investments of the system so as to minimize the risk of large losses, unless under the circumstances it is clearly prudent not to do so.
4. In accordance with the documents and instruments governing the system insofar as those documents and instruments are consistent with this part.

Education Code Section 22250

Education Code – Exclusive Purpose of Systems Assets

- (a) Except as provided in subdivision (b), the assets of the plan shall never inure to the benefit of an employer and shall be held for the exclusive purposes of providing benefits to members and beneficiaries and defraying reasonable expenses of administering the system.
- (b) In the case of a contribution that is made by an employer by a mistake of fact, subdivision (a) shall not prohibit the return of that contribution within one year after the system knows, or should know in the ordinary course of business, that the contribution was made by a mistake of fact.

Education Code Section 22251

Education Code – Prohibited Transactions

Except as otherwise provided by law, the board and the officers and employees of the system shall not cause the system to engage in a transaction if they know or should know that the transaction constitutes a direct or indirect:

- (a) Sale or exchange, or leasing, of any property from the system to a member or beneficiary for less than adequate consideration, or from a member or beneficiary to the system for more than adequate consideration.
- (b) Lending of money or other extension of credit from the system to a member or beneficiary without the receipt of adequate security and a reasonable rate of interest, or from a member or beneficiary with the provision of excessive security or an unreasonably high rate of interest.
- (c) Furnishing of goods, services, or facilities from the system to a member or beneficiary for less than adequate consideration, or from a member, retiree, or beneficiary to the system for more than adequate consideration.
- (d) Transfer to, or use by or for the benefit of, a member or beneficiary of any assets of the plan for less than adequate consideration.
- (e) Acquisition, on behalf of the system, of any employer security, real property, or loan.

Education Code Section 22252

Education Code – Prohibitions Against Self-Dealing

The board and its officers and employees of the system shall not do any of the following:

- (a) Deal with the assets of the system in their own interest or for their own account.
- (b) In their individual or in any other capacity, act in any transaction involving the system on behalf of a party, or represent a party, whose interests are adverse to the interests of the plan or the interests of the members and beneficiaries.
- (c) Receive any consideration for their personal account from any party conducting business with the system in connection with a transaction involving the assets of the plan.

Education Code Section 22253

B. Claims Against Fiduciaries

1. Purpose

This policy establishes the manner by which the Board should process and manage fiduciary liability claims throughout the lifecycle of any such claim.

2. Education Code – Fiduciary Insurance

Under the California Education Code, Part 13 Teachers Retirement Law, Chapter 4, Section 22259(b), the Board, officers and investment division staff are required to be covered with fiduciary liability insurance. This section also directs the Board to purchase such insurance in an amount it deems prudent.

3. Policy and Procedures for Handling Fiduciary Liability Claims

The Board shall purchase an insurance policy at a reasonable cost that provides the broadest coverage against liability for legal defense costs and damages. This insurance policy shall be designed to adequately protect those individuals covered so they may prudently address the difficult and complex issues they will face solely in the interest of CalSTRS.

Upon learning of an actual or potential claim against the Board, officers or investment division staff, the General Counsel shall: 1) make a determination whether the claim or potential claim is indemnifiable under California Law; and 2) in compliance with the terms of the appropriate insurance policy, provide written notice of the claim to the fiduciary insurer as required under the terms of that insurance policy. The General Counsel will, at the time she or he provides notice of the claim, seek coverage of legal fees and liability from the insurer and request the insurer satisfy its duty to defend. If the insurer determines the claim or potential claim is indemnifiable and therefore not covered under the policy, CalSTRS shall provide coverage for liability and the defense of the claim or potential claim. If the claim alleges conduct that might not be covered by the insurance policy, CalSTRS may defend under a reservation of rights. If the insurer accepts the duty to defend, the Board, in consultation with the General Counsel, may request that the insurer approve the use of the Board's preferred fiduciary insurance counsel.

Pending a determination of coverage by CalSTRS or the insurer, CalSTRS shall advance legal defense costs to defend the claim subject to such recourse as is provided by law or contract.

A. If CalSTRS Accepts Coverage

The fiduciaries who are involved in the claim shall cooperate with legal staff and CalSTRS outside counsel during the pendency of the claim. This includes providing all relevant information, communicating with legal staff and outside counsel, and otherwise acting in good faith to resolve the claim.

B. If the Fiduciary Insurer Accepts Coverage

The fiduciaries who are involved in the claim shall cooperate with legal staff and the fiduciary insurer during the pendency of the claim. This includes providing all relevant information, communicating with legal staff and the fiduciary insurer, and otherwise acting in good faith to resolve the claim.

C. If CalSTRS and the Fiduciary Insurer Both Deny Coverage

If the General Counsel has determined that the claim or potential claim is non-indemnifiable and the fiduciary insurer denies coverage for the claim, the Board shall pursue fiduciary insurance coverage through the dispute resolution process enumerated in the fiduciary insurance policy and any other available process. At the same time, any Board members who are not subject to the claim shall, with guidance from the General Counsel, determine whether CalSTRS will continue to advance defense costs and cover any resulting judgment. Factors to be considered in making this determination include:

1. Whether the claim is indemnifiable, based on the facts as alleged in the claim; and
2. Whether to engage an independent coverage counsel to issue an opinion.

In consultation with the General Counsel, the Board will determine whether to take additional action, such as seeking recovery on behalf of CalSTRS against the fiduciaries.

If all Board members are subject to the claim, and there is a dispute between CalSTRS and the fiduciary insurer regarding whether the claim is covered under the fiduciary insurance policy, and CalSTRS legal staff has determined that the claim or potential claim is non-indemnifiable, the Board should consider retaining independent coverage counsel to determine the appropriate course of action, including:

1. Whether CalSTRS can and should continue to advance legal defense costs;
2. Whether the Board member(s) should be required to post collateral if CalSTRS decides to advance legal defense costs; and
3. Whether the claim is in fact non-indemnifiable, based on the facts as alleged in the claim.

In making these determinations, an independent coverage counsel should balance the merits of the claim and the likelihood of a successful defense against the likelihood of recovery against the fiduciary personally.

*Adopted April 11, 2013
Amended June 11, 2015*

C. Fiduciary Counsel

In recognition of the need for the specialized advice of a fiduciary counsel to assist the board in discharging its fiduciary responsibilities, the board will retain independent fiduciary counsel. The fiduciary counsel will represent and advise the board regarding the nature and scope of its fiduciary duty, and the discharge of its system responsibilities.

Amended May 5, 1999
Amended September 7, 2006
Amended June 8, 2017

D. Statement of Ethical Conduct

The California State Teachers' Retirement Board has established the following Statement of Ethical Conduct and has determined that engaging in any of the following activities or conduct is inconsistent, incompatible, in conflict with or inimical to the duties of a CalSTRS Board member and/or staff.

No employment, activity, or enterprise shall be engaged in by any CalSTRS Board Member or staff, which might result in, or create the appearance of resulting in, any of the following:

1. Using the prestige or influence of the Board or staff position for private gain or the advantage of another.
2. Using CalSTRS time, facilities, employees, equipment or supplies for private gain or advantage, or the private gain or advantage of another.
3. Using confidential information acquired by virtue of CalSTRS activities for the private gain or advantage of another, including, but not limited to, so-called "insider trading" as described in subsection "C", *infra*.
4. Receiving or accepting money or any other consideration from anyone other than the state or CalSTRS for the performance of an act which the Board Member or staff would be required or expected to render in the regular course or hours of his/her duties.
5. Performance of an act in other than his/her capacity as a Board Member, Constitutional Officer/Director of Finance, their delegates or staff, knowing that such act may later be subject, directly or indirectly, to the control, inspection, review, audit, or enforcement by such person or by CalSTRS.
6. Receiving or accepting, directly or indirectly, any gift, including money, any service, gratuity, favor, entertainment, hospitality, loan, or any other thing of value, from anyone who is doing or is seeking to do business of any kind with the state or whose activities are regulated or controlled in any way by the state, under circumstances from which it reasonably could be substantiated that the gift was intended to influence him/her in his/her official duties or was intended as a reward for any official action on

his/her part.

7. As a Board member, having an ex parte communication, with any party or their representative, on the merits of any matter in controversy arising out of a challenge to a benefit determination or audit finding made by CalSTRS staff. This prohibition on ex parte communications shall commence the moment a disagreement arises that could result in litigation and shall remain in full effect until the Board has made a final determination on the matter.

The Board's communications with the CalSTRS General Counsel, or with someone acting on the General Counsel's behalf, are not considered ex parte communications. However, at all other times CalSTRS staff members and officers, fall within the definition of "party" and all communications with staff members and officers regarding the merits of any matter in controversy arising out of a challenge to a benefit determination or audit finding constitute ex parte communications.

If a Board member receives a communication in violation of this section, the Board member shall immediately refer the communication to the CalSTRS Ethics and Compliance Officer, who will then follow the procedures outlined by the Administrative Procedures Act to notify all parties of the communication. If a Board member has a question about whether a communication is an ex parte communication, the Board member shall refer the communication to the CalSTRS Ethics and Compliance Officer for determination.

8. Publishing any writing or making any statement to the media, to state administrators, legislative personnel, or members of the public which purports to represent CalSTRS' position or policy on any matter or subject, before the Board has formally adopted a policy or position on the matter or subject. This section shall not be interpreted to preclude Board Members or staff, as private citizens, from expressing their personal views.

Nothing in this Statement shall exempt any Board Member or staff from applicable provisions of any other laws of this State. The standards of conduct set forth in this Statement are in addition to those prescribed in the System's Conflict of Interest Code.

Amended May 5, 1999

Amended September 7, 2006

Amended April 12, 2012

E. Policy Prohibiting Insider Trading

I. Background

The Board is committed to the highest ethical standards and strictest adherence to federal, state and foreign securities laws and regulations regarding "insider trading." To ensure that the California State Teachers' Retirement System (CalSTRS) operates in a manner commensurate with its goal of promoting integrity in the investment, administration and

management of securities, the Board has adopted this Policy Prohibiting Insider Trading. The policy applies to Board members and CalSTRS staff, including investment consultants and contractors affiliated with CalSTRS (hereinafter referred to as “staff”), in possession of or with access to non-public information relating to publicly traded securities. The prohibition on insider trading continues to apply even after resignation from the Board or termination of employment until such time, if ever, that the information becomes generally available to the public other than through disclosure by or through the Board member or staff.

“Insider trading” has been defined as buying or selling securities on the basis of material, nonpublic information relating to those securities. Any person who possesses material, nonpublic information is considered an “insider” as to that information. The prohibition against insider trading may reach anyone, not just a corporate insider, who has access to the material, nonpublic information. The scope of insider trading liability has been extended to “controlling persons,” which includes any entity or person with power of influence or control over the management, policies or activities of another person. It has also been extended to “tippees” who receive material, nonpublic information from an insider when the “tipper” (the “insider”) breaches a fiduciary duty for his or her personal benefit and the “tippee” knows or has reason to know of the breach. Liability has also been extended to fiduciaries who trade based upon misappropriated material nonpublic information obtained from their principal. The law provides civil and criminal penalties for insider trading violations.

Information is deemed material if it would be considered important by a reasonable investor in deciding whether to buy, sell or refrain from any activity regarding that company’s securities. Material information may be either positive or negative and can relate to any aspect of a company’s business. Common examples of material information include, but are not limited to: unpublished financial results and projections, news of a merger or acquisition, stock splits, public or private securities/debt offerings, changes in dividend policies or amounts, gain or loss of a major customer or supplier, major product announcements, significant changes in

senior management, a change in accounting policies, major problems or successes of the business, and information relating to a company against whom CalSTRS is considering securities litigation. Material nonpublic information may not be used by Board members or staff for personal gain or to benefit relatives or friends.

Information is considered “nonpublic” if it is not available to the general public. Once it is released to the general public, it loses its status as “inside” information. However, for nonpublic information to become public, it must have been made generally available to the securities marketplace, and sufficient time must pass for the information to become available in the market. To show that material information is public, it is generally necessary to show some fact verifying that the information has become generally available, such as disclosure in company filings with the SEC or company press releases to a national business and financial wire service, a national news service, or a national newspaper.

II. Policy on Insider Trading

Board members and staff may be provided or have access to confidential information, including material, nonpublic information. Any information not publicly available must be treated as confidential even if it is not designated as confidential. It is the duty of Board members and staff to maintain the confidentiality of information and to not misuse confidential information, including material nonpublic information, belonging to or relating to CalSTRS. Board members and staff who come into possession of material nonpublic information must not intentionally or inadvertently communicate it to any person, including relatives and friends, unless the person has a need to know for legitimate reasons in keeping with their responsibilities to the System.

If Board members or staff are uncertain whether a piece of information is material, nonpublic information, they shall consult with the General Counsel or the Ethics and Compliance Officer before taking action based upon that information. Special care should be taken so that confidential information is not disclosed inadvertently. Examples of inadvertent disclosure include, but are not limited to, discussing confidential information in the cafeteria, elevators, or non-private locations, and leaving confidential documents exposed on one’s desk or in a public area.

Board members and staff in possession of material, nonpublic information may not purchase or sell securities of the concerned company or other publicly traded securities to which the information pertains. Board members and staff also may not disclose material, nonpublic information to another person who could subsequently use that information for profit. Recommending purchases or sales of securities to which the material nonpublic information relates, even without disclosing the basis for the recommendation, is prohibited.

Like insider trading, “front running” may subject Board members or CalSTRS staff to criminal and/or civil proceedings. Front running occurs when a person enters into a trade of securities with advance knowledge of pending orders from other investors. It could occur, for example, when any Board member or CalSTRS staff covered by this policy trades with the knowledge that a trade is pending on behalf of CalSTRS. Furthermore, front running may constitute a

misappropriation of CalSTRS proprietary information for private or personal gain. It is therefore the policy of CalSTRS that front running is prohibited. Board members and CalSTRS staff may not place an order for a personal securities transaction when they know that a CalSTRS securities transaction is pending in a security of the company that is the subject of the personal securities transaction, and must wait until 15 days after such CalSTRS securities transaction is executed before placing an order for a personal securities transaction involving the securities of the same company. Likewise, Board members and CalSTRS staff may not knowingly delay, hinder, modify, or cancel any internal CalSTRS buy or sell recommendation, decision, or trading order intending to facilitate a personal securities transaction that, but for the action of the Board member or CalSTRS staff person would otherwise constitute front running or violations of state or federal laws.

Board members and staff in possession of material, nonpublic information relating to a tender offer, acquired directly or indirectly from the bidder or target company, may not trade in target company securities. Board members and staff also may not disclose such material, nonpublic information to another person where it is reasonably foreseeable that the recipient of the information could purchase or sell such company securities.

Board members and staff in possession of material, nonpublic information may not purchase, directly or indirectly, any security in the initial public offering of such security. Such new issue securities may only be purchased in the secondary trading market once such a market is established. Board members and staff also may not encourage, facilitate, or arrange such a purchase by or on behalf of any other person.

III. Compliance

The Board is committed to the highest ethical standards and strictest adherence to the laws and regulations regarding insider trading. This policy is to be delivered to all new Board members and staff, including consultants, upon commencement of a relationship or employment with CalSTRS. Each Board member and all CalSTRS staff must read and comply with the Policy. The certification in Attachment I must be completed by Board members and staff within 30 days of receipt of the policy and annually by April 1 of each year thereafter. The certifications shall be delivered to the CalSTRS General Counsel.

The Chief Investment Officer shall obtain written confirmation from each external manager that handles securities for the System that it has a policy against insider trading that, at a minimum, contains the same prohibitions as this policy and each external manager must confirm that it enforces the policy. The written confirmation must be received by CalSTRS within 30 days of commencement of the manager's relationship with CalSTRS.

Statements of Economic Interests (Form 700) filed by Board members or staff may be reviewed by CalSTRS to insure compliance with this policy. Board members and staff should report any suspected violation of this policy to the CalSTRS General Counsel. The General Counsel is responsible for causing an investigation of any reported violation. Following such investigation, if the General Counsel concludes that the policy may have been violated, he or she shall take appropriate action.

Violation of this policy may result in disciplinary action, including dismissal of employees, and may result in termination of contracts for consultants and other contractors. Any disciplinary action for violation of the policy may be in addition to any civil or criminal liability under federal and state securities laws and regulations and is not subject to appeal on the grounds that the violation did not ultimately result in any actual civil or criminal investigation or other legal proceeding.

IV. Training

In addition to the requirements set forth in the Compliance section of this policy, all CalSTRS staff shall participate in training on the Policy Prohibiting Insider Trading at the time of employment with CalSTRS, and annually thereafter. The training shall also be available to all Board Members annually and as part of the Board Member Orientation. In no event shall the failure to provide training or the failure to attend training excuse noncompliance with this policy.

Amended May 5, 1999
Amended September 7, 2006
Amended November 6, 2008
Amended February 10, 2011
Amended June 6, 2013

ATTACHMENT I

CalSTRS Insider Trading Policy Certification

I, _____, hereby certify that I have read and understand the Policy Prohibiting Insider Trading and agree to adhere strictly to the Policy. I further certify that I understand that the failure to act in conformance with the Policy Prohibiting Insider Trading will result in serious consequences, including termination from my employment or contract with CalSTRS.

Date: _____

Signature

F. Conflicts of Interest

1. All CalSTRS Board Members and specified staff are subject to the disclosure and reporting requirements of the System's Conflict of Interest (COI) Code and Fair Political Practices Commission (FPPC) regulations. Any Board Member or staff that receives a gift, honoraria, or travel expenses (paid or reimbursed) or the actual transportation and related lodging and subsistence from any third party other than either the System or the State of California has the responsibility to determine whether the receipt of the same must be disclosed and reported under the System's COI Code and FPPC regulations. This section applies to CalSTRS travel, as well as other travel expenses covered by the System's COI Code and FPPC regulations. Board Members and staff are referred to Section 500(D)(b) which governs reimbursement for travel expenses and provides that where third parties offer to pay CalSTRS travel expenses for Board members or staff, specified prior approval is required.

1. Receipt of any gift, honoraria, or payment of actual transportation and related lodging and subsistence or any payment or reimbursement of the same to Board Members or staff regarding travel of any kind by third parties may subject the recipient Board Member or staff to disqualification from participation in making Board Policy related to the third party. It is the recipient's responsibility to make sure that he or she does not engage in any action that places himself or herself in a conflict of interest.

2. Under Government Code Section 87105 and Section 18702.5 of the regulations of the FPPC, a Board member or staff member who has a financial interest in a decision of CalSTRS must, following the announcement of the agenda item to be discussed or voted upon but before either the discussion or vote commences, do the following:
 - Publicly identify the financial interest that gives rise to the conflict;
 - Recuse themselves from discussing, voting, or attempting to use their influence to affect the outcome of a decision of the public body; and
 - Leave the room until after the discussion and vote on the item in question.
 - A Board Member or staff member that has a financial interest in a matter placed on the consent agenda must observe the above requirements with the exception that he or she is not required to leave the room during the consent agenda.
 - In the event that the discussion or vote is to occur in closed session, the public identification may be made orally during the open session before the body goes into closed session and may be limited to a declaration that his or her recusal is because of a conflict of interest under Government Code Section 87100.

*Reference: California Code of Regulations Title 5, Div. 3, Ch 1,
Article 11, §22000*

*Amended May 5, 1999
Amended September 7, 2006
Amended April 2, 2014*

Amended April 8, 2016 to reflect technical changes to the policy section cross-reference

G. Political Activities

Essentially, Government Code Sections 3201-3209 provide:

1. Except as otherwise provided below, no restriction shall be placed on the political activities of a state officer or employee.
2. No one who holds, or who is seeking election or appointment to, any office or employment in a state or local agency shall, directly or indirectly, use, promise, threaten or attempt to use, any office, authority, or influence, whether then possessed or merely anticipated, to confer upon or secure for any individual person, or to aid or obstruct any individual person in securing, or to prevent any individual person from securing, any position, nomination, confirmation, promotion, or change in compensation or position, within the state or local agency, upon consideration or condition that the vote or political influence or action of such person or another shall be given or used in behalf of, or withheld from, any candidate, officer, or party, or upon any other corrupt condition or consideration. This prohibition shall apply to urging or discouraging the individual employee's action.
3. No one who holds, or who is seeking election or appointment to, any office shall, directly or indirectly, offer or arrange for any increase in compensation or salary for an employee of a state or local agency in exchange for, or a promise of, a contribution or loan to any committee controlled directly or indirectly by the person who holds, or who is seeking election or appointment to, an office.
4. A state officer or employee may solicit or receive political contribution to promote or defeat a ballot measure which affects rates of payment, hours of work, retirement, civil service, or other working conditions of state employees. However, such activity is prohibited during working hours.

Amended May 5, 1999

H. Disclosure of Campaign Contributions, Charitable Contributions, Gifts, Recusal Requirement, and Ban on Specified Gifts

1. Campaign Contributions

Any party who engages in business with CalSTRS for gain shall disclose campaign contributions, as defined under the California Political Reform Act, valued in excess of \$250, made to or on behalf of any existing CalSTRS Board member, candidates for Board member, Controller, Treasurer, Superintendent of Public Instruction, CalSTRS officer or employee.

2. Charitable Contributions

No party who engages in business with CalSTRS for gain shall provide any charitable contribution to a charitable entity, valued in excess of \$250 individually or in the aggregate in any calendar year, made at the request of any Board member, or CalSTRS officer or employee.

3. Gifts

A. No party who engages in business with CalSTRS for gain shall provide gifts to Board members or to CalSTRS officers or employees exceeding the following limits:

i. Gifts, including meals or entertainment, with a cumulative value exceeding the current monetary limit established by the Fair Political Practices Commission individually or in the aggregate in any calendar year, given to any Board member or CalSTRS officer or employee. The dollar amount of this limit shall be adjusted biennially in each odd numbered year to reflect the cost of living adjustments made by the Fair Political Practices Commission to the gift limit contained in Government Code section 89503.

ii. This gift prohibition shall not extend to meals or related expenses provided under the following circumstances:

a. Food, beverages and registration at group events to which substantial numbers of employees of an institution are invited;

b. Actual and reasonable expenses for food, beverages, travel, lodging and/or registration provided to permit participation in a meeting directly tied to official or professional duties if participation has been approved in writing by the Chief Executive Officer (for CalSTRS staff) or by the CalSTRS Board (for Board members).

B. Any party who engages in business with CalSTRS for gain shall disclose gifts aggregating more than \$50 in value made to Board members, or to CalSTRS officers or employees.

4. Recusal

A. Any Board member who receives campaign contributions, charitable contributions, or gifts that individually or in the aggregate exceed the amount of \$250 in a calendar year shall recuse himself/herself from any involvement in a matter involving the maker of the contributions or gifts for a period of 12 months following the date of the most recent contribution or gift.

- B. Any Board member who returns, donates, or reimburses the donor for gifts subject to these restrictions within 30 calendar days of receipt of the gift shall not be subject to the recusal requirement. Gifts may be returned, donated or reimbursed as specified in California Code of Regulations, Title 2, Division 6, Chapter 9.5, section 18943.

5. Time and Coverage of Disclosures

Disclosure of campaign contributions, charitable contributions, and gifts shall be required as follows:

- A. Upon submission of an initial application or proposal to do business with the System (for the preceding 12-month period).
- B. At the time the final decision is to be made regarding the business proposal (to cover the interim period following the initial application).
- C. Annually, on or before April 1 for the previous calendar year. (CalSTRS will use FPPC guidelines to determine which officials in a specific firm must file disclosure statements.) You are not required to file an annual Form 600-H under this subsection if a Form 600-H has been filed with CalSTRS in accordance with subsection (5)(B) between October 1 and December 31 of the preceding year.

6. Sanctions for Violation of Policy

Any violation of this policy may lead to disqualification from future business with the System for a period of two years following a determination by the Board that a violation has occurred. The General Counsel is responsible for causing an investigation of any reported violation to be made and shall report any documented violation to the Board for action.

7. Application of Policy

Nothing in this policy supersedes any provision of State law. Those entities engaged in business with the System may also have reporting requirements under the Political Reform Act, California Government Code section 81000 et seq. Also, Board members who are either elected to the Board by a CalSTRS constituency or who are appointed to the Board but also serve as an elected official of a local body are subject to Government Code section 84308, which prohibits the receipt, solicitation or direction of a campaign contribution of more than \$250 while a matter affecting a financial interest of the maker of the contribution is pending, and for three months following the date a decision is rendered on the matter. Section 84308 also requires recusal of the Board member from any involvement in the matter if a contribution over \$250 has been received within the preceding 12 months, unless the contribution was returned

no later than 30 days from the time the Board member knew or should have known about the contribution and the matter involving the maker of the contribution.

Reference: Education Code Section 22363

Amended December 7, 2006

Amended June 6, 2007

Amended February 7, 2008

Amended April 8, 2016

I. Disclosure of Communications

1. Disclosure of Communications Regarding Investment Transactions that Require Investment Committee Approval
 - A. During the evaluation of any prospective investment transaction, no party who is financially interested in the transaction nor any officer or employee of that party, may knowingly communicate with any board member concerning any matter relating to the transaction or its evaluation, unless the financially interested party discloses the content of the communication in a writing addressed and submitted to the General Counsel and the Board prior to the Board's action on the prospective transaction. This shall not apply to communications that: (1) are part of a noticed board meeting; (2) are incidental, exclusively social, and do not involve the system or its business, or the Board or staff member's role as a system official; or (3) do not involve the system or its business and that are within the scope of the Board or staff member's private business or public office wholly unrelated to the system.
 - i. The writing shall disclose the date and location of the communication, and the substance of the matters discussed. It shall be submitted no later than five working days prior to the noticed Board meeting at which the investment transaction is being considered unless the communication occurs less than five working days before the noticed Board meeting, in which case the writing shall be submitted immediately after the communication occurs.
 - ii. Consistent with its fiduciary duties, the Board shall determine the appropriate remedy for any knowing failure of a financially interested party to comply with this policy, including, but not limited to, outright rejection of the prospective investment transaction, reduction in fee income, or any other sanction.

- B. Any Board member who participates in a communication subject to this policy shall also have the obligation to disclose the communication to the General Counsel and the Board, prior to the Board's action on the prospective transaction. The disclosure shall be in writing and shall disclose the date and location of the communication and the substance of the matters discussed. It shall be submitted no later than five working days prior to the noticed Board meeting at which the investment transaction is being considered unless the communication occurs less than five working days before the noticed Board meeting, in which case the writing shall be submitted immediately after the communication occurs. The communications disclosed under this section shall be made public, either at the open meeting of the board in which the transaction is considered, or if in closed session, upon public disclosure of any closed session votes concerning the investment transaction.
- i. This disclosure obligation shall not apply to communications that are general in nature and content, such as: (1) those with regard either to the nature of the party's business or interests or with regard to public information regarding CalSTRS; (2) a simple expression of the party's interest generally in doing business with CalSTRS or having CalSTRS invest in or with the party communicating with the Board member; or (3) a simple expression by the Board member in relation to the performance of an investment or service provided to CalSTRS.
 - ii. An alleged failure of a Board member to disclose communications as required herein shall be referred to the Chairperson for appropriate action unless the Chairperson is a party to the communication in question, in which case the matter shall be referred to the Vice-Chair.
 - iii. The General Counsel shall provide the Board with an annual summary of the communications disclosed pursuant to this section.

Education Code Reference 22364

2. Disclosure of Communications Regarding Investment Transactions that Do Not Require Investment Committee Approval

The disclosure obligation regarding communications covered by Subsection 600 (I)(1) for a party or its officer or employee who is financially interested in an investment transaction shall also apply to communications involving transactions the Chief Investment Officer has been delegated the authority to approve without the need for Investment Committee action. Upon the initiation of any consideration by the CalSTRS Investment Office or one of its consultants or advisors of the review of a proposed investment transaction, the firm seeking a CalSTRS investment shall be given a copy of this CalSTRS policy together with a form to use to report any communications with Board members for which disclosure is required. The required disclosure shall be made within 10 calendar days of the communication. There shall be no parallel obligation on the part of the Board member to disclose a

communication involving a transaction that has been delegated to the Chief Investment Officer, although Board members are urged to keep an informal record of communications that would be subject to disclosure if the transaction ultimately comes before the Investment Committee and must be reported under Subsection 500 (I)(1).

The General Counsel shall provide the Board with an annual summary of the communications disclosed pursuant to this paragraph.

3. Disclosure of Communications between Board Members and Staff Regarding Investment Transactions

As a general matter, the Board recognizes that the free flow of communication between individual Board members and staff or consultants is beneficial to the conduct of CalSTRS business and that requiring disclosure of all or a large part of such regular communication would create a burdensome reporting requirement that would likely serve no useful purpose. However, in those instances where conduct by an individual Board member can be reasonably interpreted as an attempt to influence the outcome of a Board or staff decision or consultant recommendation in an investment transaction, the Board recognizes that such communications could create the potential for misunderstanding, misinformation or conflicting instructions and could be reasonably interpreted as inappropriately affecting the board, staff or consultant. Such communications do not always rise to the level of “undue influence,” as defined and discussed in Section 600 (I)(4), but nevertheless should be subject to disclosure.

Any communication regarding a potential investment transaction initiated by Board member with either a CalSTRS employee or consultant in which the Board member is advocating for a specified outcome shall be documented by the CalSTRS employee or consultant and reported to the General Counsel. Such communications will be disclosed to the Board if and when, in the judgment of the General Counsel, they may be material to the Board’s deliberation with respect to any CalSTRS matter.

4. Avoidance of Undue Influence

The Board recognizes that if a Board member or a third party attempts to direct staff or a Board member to a specified action, decision or course of conduct through the use of undue influence, sound decision-making could be compromised to the ultimate detriment of the Board as a whole and/or CalSTRS members, retirees and beneficiaries.

Any staff member or Board member who believes that he or she has been subject to the attempted exercise of undue influence, as described above, should report the occurrence immediately and simultaneously to his/her Branch Deputy Chief Executive Officer/Chief Investment Officer (in the case of staff members) and to the General Counsel. The General Counsel shall investigate the situation immediately and is authorized to use the services of an outside law firm to conduct the investigation if he or she deems it appropriate. Following such investigation, if the General Counsel concludes that an exercise of undue influence was attempted, he or she shall take

whatever action deemed to be appropriate, which shall include notification to the Board and thereafter a public disclosure during an open session meeting of the Board. If the General Counsel believes that he or she personally has been subjected to an attempted exercise of undue influence, he or she shall immediately advise the Board Chair unless the circumstances dictate that another Board member should instead be notified. The Board Chair or other Board member shall investigate the situation with the assistance of the Fiduciary Counsel and take whatever action he or she deems to be appropriate.

Definitions:

“Undue Influence” is defined as the employment of any improper or wrongful pressure, scheme or threat by which one’s will is overcome and he or she is induced to do or not to do an act which he or she would not do, or would do, if left to act freely.

“Third Party” means and includes a person or entity that is seeking action, opportunity, or a specific outcome from CalSTRS regarding a CalSTRS matter. The Third Party may be seeking the action, opportunity, or outcome for his or her or its own behalf or the Third Party may be seeking it on behalf of another person or entity in the capacity of a representative, agent or intermediary, or as an advocate for a cause or group of individuals or entities. This definition includes public officials.

Education Code Reference 22364

Adopted January 14, 1999

Amended November 3, 2006

Amended April 8, 2016 to reflect technical changes to the policy section cross-reference

J. Disclosure of Placement Agents and Payments

I. Disclosure of Placement Agent Information and Fees

Prior to CalSTRS entering into any investment transaction or investment management contract with an external manager, the external manager shall disclose the following to CalSTRS’ Chief Investment Officer, in writing:

1. The existence of relationships between the external manager and any placement agent who assisted the external manager with either the solicitation of CalSTRS as a potential client or the retention of CalSTRS as an existing client.
2. A resume for each officer, partner or principal of the placement agent detailing the person’s education, professional designations, regulatory licenses and investment and work experience. If any such person is a current or former CalSTRS or CalPERS Board member, employee, consultant or member of the immediate family of such a person, that fact shall be specifically noted.
3. A description of any and all compensation of any kind provided, or agreed to be provided, to a placement agent.

4. A description of the services to be performed by the placement agent, as well as a statement disclosing whether the placement agent is utilized by the external manager with all prospective clients, a subset of prospective clients or a single prospective client.
5. The names of any current or former CalSTRS or CalPERS Board members, employees or consultants who suggested the retention of the placement agent.
6. A statement whether the placement agent, or any of its affiliates, are registered with the Securities and Exchange Commission or the Financial Industry Regulatory Association, or any similar regulatory agent in a country other than the United States, and the details of that registration or an explanation as to why no registration is required.
7. A statement that the external manager and the placement agent are in full compliance with the requirements of the Political Reform Act as it relates to lobbyists.
8. A statement whether the placement agent, or any of its affiliates, is registered as a lobbyist with any other state or national government.
9. If the external manager utilized the services of a person who would otherwise be a placement agent but for an exception provided in Government Code section 7513.8, subdivision (f) or section 82047.3, a statement that the external manager is in full compliance with the applicable exemption.

These disclosures shall be made on a form provided by CalSTRS. For investment transactions that are subject to the approval of the Investment Committee, the Chief Investment Officer will submit any information disclosed pursuant to this section prior to Investment Committee action on the transaction. For investment transactions that do not require Investment Committee approval, the Chief Investment Officer will provide a quarterly summary to the Investment Committee of any disclosures made pursuant to this section.

Any external manager or placement agent that violates this policy shall not solicit new investments from CalSTRS for five years after the violation was committed. However, this prohibition may be reduced by a majority vote of the Board at a public session upon a showing of good cause.

CalSTRS shall not enter into any agreement with an external manager that does not agree in writing to comply with this policy.

This disclosure policy shall not require the Board to take any action that the Board does not, in good faith, find to be consistent with the fiduciary responsibilities of the Board as described in Section 17 of Article XVI of the California Constitution.

II. Disclosure of Placement Agent Campaign Contributions and Gifts

1. Campaign Contributions

Any placement agent, prior to acting as a placement agent in connection with any potential CalSTRS investment, shall disclose to the Chief Investment Officer all campaign contributions made by the placement agent to any elected member of the Board:

- A. During the prior 24-month period.
- B. During the time the placement agent is receiving compensation in connection with a CalSTRS investment.

2. Gifts

Any placement agent, prior to acting as a placement agent in connection with any potential CalSTRS investment, shall disclose to the Chief Investment Officer all gifts, as defined in Section 82028 of the Government Code, given by the placement agent to any member of the Board:

- A. During the prior 24-month period.
- B. During the time the placement agent is receiving compensation in connection with a CalSTRS investment.

III. Prohibited Conduct

A member or employee of the Board shall not, directly or indirectly, by himself or herself, or as an agent, partner or employee of a person or entity other than the Board, sell or provide any investment product that would be considered, by the recipient fund as an asset of the fund, to any public retirement system in California.

IV. Definitions

“Board” means either of the following: (1) The Teachers’ Retirement Board, or (2) The retirement board of a public pension or retirement system, as defined in subdivision (h) of Section 17 of Article XVI of the California Constitution.

“External manager” means either of the following: (1) A person who is seeking to be, or is, retained by a board or an investment vehicle to manage a portfolio of securities or other assets for compensation, or (2) A person who manages an investment fund and who offers or sells, or has offered or sold, an ownership interest in the investment fund to a board or an investment vehicle.

"Investment fund" means a private equity fund, public equity fund, venture capital fund, hedge fund, fixed income fund, real estate fund, infrastructure fund, or similar pooled investment entity that is, or holds itself out as being, engaged primarily, or proposes to engage primarily, in the business of investing, reinvesting, owning, holding, or trading securities or other assets.

"Investment vehicle" means a corporation, partnership, limited partnership, limited liability company, association, or other entity, either domestic or foreign, managed by an external manager in which a board is the majority investor and that is organized in order to invest with, or retain the investment management services of, other external managers.

"Person" means an individual, corporation, partnership, limited partnership, limited liability company, or association, either domestic or foreign.

"Placement agent" means any person directly or indirectly hired, engaged, or retained by, or serving for the benefit of or on behalf of, an external manager or an investment fund managed by an external manager, and who acts or has acted for compensation as a finder, solicitor, marketer, consultant, broker, or other intermediary in connection with the offer or sale to a board or an investment vehicle either of the following: (1) The investment management services of an external manager who manages a portfolio of securities or other assets for compensation, or (2) An ownership interest in an investment fund managed by an external manager who manages an investment fund and who offers or sells, or has offered or sold, an ownership interest in the investment fund to a board or investment vehicle.

Reference: Government Code Sections 7513.8, 7513.85, 7513.9, 7513.95

Adopted November 3, 2006

Amended February 3, 2010

*Revised to reflect legislation requiring adoption of a Placement Agent Disclosure Policy,
Amended April 8, 2010*

Revised to make changes in accordance with AB 1743, Amended February 10, 2011

Revised to make changes in accordance with SB 398, Amended November 8, 2012

K. No Contact Policy

During the process leading to an award of any contract by the system, no CalSTRS staff, member of the board or its staff, shall knowingly communicate concerning any matter relating to the contract or selection process with any party financially interested in the contract, or an officer or employee of that party, unless the communication is (1) part of the process expressly described in the request for proposal or other solicitation invitation, or (2) part of a noticed board meeting, or (3) as provided below. Any applicant or bidder who knowingly participates in a communication that is prohibited by this paragraph shall be disqualified from the contract award.

The procedures and prohibitions prescribed by this section shall not apply to:

1. Communications that are incidental, exclusively social, and do not involve the system or its business, or the board or staff member's role as a system official.
2. Communications that do not involve the system or its business and that are within the scope of the board or staff member's private business or public office wholly unrelated to the system.

Reference: Education Code 22364(a) and (c)

Adopted April 3, 2014

Amended April 8, 2016 to clarify the application of the policy to staff

L. Gift Policy

This Gift Policy is established to support the ethical and fiduciary responsibilities of the board and promote the ethical conduct of staff by eliminating potential conflicts of interest, or the appearance of conflicts of interest, which may be encountered as a result of receiving gifts from individuals or entities with an actual or reasonably likely business or financial connection with CalSTRS.

Accordingly, CalSTRS board members and staff may not accept any gift with an aggregate value above the monetary limit established by the FPPC from any individual or entity with an actual or reasonably likely business or financial connection with CalSTRS. A gift is defined as anything of value, whether tangible or intangible, real or personal property, goods or services, that provides a personal benefit to an individual when the individual does not provide full consideration for the value of the benefit received. The recipient of the benefit has the burden of demonstrating that any consideration paid was of equal or greater value than the benefit received.

This Policy is to be read in harmony with other CalSTRS governance policies including the Statement of Ethical Conduct, Board Member Code of Conduct, and the Mission and Values Statement. This Policy does not alter or eliminate the requirements of the Political Reform Act or other California statutory or regulatory authority, including the requirements set forth in California Code of Regulations, Title 5, Section 22000 regarding the filing of statements of economic interests.

Compliance with this policy will be monitored through annual written attestations of compliance by the board and staff which the Office of the General Counsel will distribute, collect and review. Known violations of this policy are to be reported to the Office of Ethics and Compliance.

Any questions about the intention or application of this Gift Policy should be directed to the Ethics and Compliance Counsel.

Reference: Government Code Sections 89503, 82028(a) and (b); California Code of Regulations, Title 2, Sections 18940.2 and 18940(a).

Adopted November 7, 2013

700 COMPENSATION POLICY DESIGNATED EXECUTIVE MANAGEMENT AND INVESTMENT STAFF

PURPOSE

Education Code Section 22212.5 provides that the Teachers' Retirement Board (TRB) shall determine the compensation of CalSTRS Chief Executive Officer (CEO), Chief Operating Officer (COO), Chief Financial Officer (CFO), System Actuary, General Counsel, Chief Investment Officer (CIO), and other investment officers and portfolio managers designated as managerial. Guided by the Compensation Committee's Charter, the purpose of this policy is to set forth, in a transparent way, the TRB's general compensation philosophy that directs the content contained within Administrative Procedures for the TRB's Compensation Policy Section 700 ([Administrative Procedures](#)) and implementation of the compensation plan. It also guides the Compensation Committee's activities in making decisions and recommendations on specific compensation matters. CalSTRS compensation program is administered under the TRB's full and rigorous oversight and with supporting review provided by internal and independent/third party auditors. The Charter, the Policy and the Administrative Procedures are meant to be read together in harmony and are not intended to be in conflict with each other.

EXECUTIVE SUMMARY

The Compensation Committee has the responsibility to ensure the compensation program is properly designed to support organizational objectives and develop for board adoption administrative procedures that document the compensation plan and administrative procedures based on the TRB's compensation philosophy.

The TRB has developed a compensation policy that reflects careful consideration of the following:

- To achieve its business and investment objectives, CalSTRS must be able to hire, motivate, and retain high-quality executive management and investment staff. A reasonable and competitive pay program is critical to achieving these objectives.
- While CalSTRS is a public organization, private sector firms are a key labor market for CalSTRS executive management and investment professionals.
- For executive management and investment professionals, private sector pay levels are generally higher than public sector pay levels, with much of the difference attributable to relatively higher private sector cash incentives/bonuses.

COMPENSATION PROGRAM OBJECTIVES

As adopted by the TRB, CalSTRS compensation program for executive management and investment staff is designed to be:

- *Internally Equitable*: That is, comparable pay opportunities should be provided to employees in positions requiring similar levels of skill, responsibility, and impact on investment performance.

- *Externally Competitive:* In particular, cash compensation opportunities should be competitive with those offered by the TRB-approved compensation comparator group.
- *Incentive-Based:* Specifically, incentive opportunities should represent a major portion of cash compensation and should attract and retain high caliber investment staff, motivate and enhance individual and team effort, and reward superior investment performance.

MARKET POSITION PHILOSOPHY

CalSTRS has high-quality executive management and investment staff. These personnel are critical to the System's ability to generate investment returns that exceed CalSTRS benchmarks without taking unnecessary risk and serve its members and beneficiaries. Given the high quality of the System's staff, the TRB desires to position staff compensation to stay in-line with the competitive market.

The TRB will define in the administrative procedures, the compensation comparator group to be used in comparing its pay levels to the competitive market. Pay comparisons will be targeted towards other employers with which CalSTRS competes for talented professionals with similar skills. The TRB will also define the percentile level of targeted market pay. The competitive market for both base pay and incentive purposes is the same. Relevant market compensation data will be secured from reputable, third party sources, every two years or as otherwise determined by the TRB's Compensation Committee. The compensation comparator group will be reassessed and may be modified by the TRB, in consultation with its compensation consultant, prior to assessing competitive market data.

COMPENSATION PROGRAM ELEMENTS

The Compensation Program consists of the following elements:

- Base Pay
- Incentive Pay
- Recruitment Pay Differential
- Educational Incentive
- Relocation

Base Pay Overview

The TRB has approved the practice of setting salary ranges, rather than a single rate of pay, for executive management and investment staff. The TRB will continue this practice for these and any future positions covered under the Education Code Section 22212.5

Base salary ranges, with specified minimums and maximums, will be established for executive management and investment staff using market data from the TRB approved compensation comparator group(s). Base salary ranges for executive management and investment staff are typically reviewed every two years (i.e., through a comprehensive market pay analysis using data from third

party sources). In intervening years, special market reviews and/or analysis may be conducted to validate existing salary ranges and/or to establish a new recruiting range when a position becomes vacant. As approved by the TRB, the administrative procedures will specify the administrative details and program mechanics including, but not limited to, the following:

- Base salary ranges
- Salary adjustment criteria, including annual maximum salary movement
- Individual performance criteria
- Targeted salary levels
- Timing and effective dates
- Approval authority

Incentive Plan Overview

As approved and adopted by the TRB, CalSTRS incentive plan is intended to:

- Reinforce the System's investment, governance and compensation philosophies and objectives.
- Help CalSTRS attract, motivate, and retain top-performing executives and investment staff.
- Align incentive payouts with overall System, functional area, and individual performance.
- Focus staff on key investment objectives/benchmarks that are measured on a long-term basis.

The TRB approves the positions that may be eligible to participate in the incentive plan. Actual incentive plan participation is determined based on each incumbent's employment status and the Compensation Committee's assessment of the position's impact on CalSTRS overall investment and business performance. Incentive opportunities will vary by position based on differing levels of accountability, responsibility, competitive pay requirements and staff tenure. Incentive opportunities reflect competitive cash compensation levels and the Compensation Committee's assessment of the optimal mix of base salary and incentive opportunity. As approved by the TRB, the administrative procedures will specify the administrative details, criteria, and incentive plan mechanics including, but not limited to, the following:

- Participation eligibility
- Incentive opportunity levels
- Quantitative performance components, including Total Fund and Asset Class performance benchmarks, and weightings
- Qualitative performance components and weightings
- Performance measurement periods
- Individual personal performance criteria and performance expectations
- Pro-rata awards
- Timing of payment

- Payment at separation
- TRB’s discretion in the event of qualifying triggers (investment performance, ethics violation, and/or reputational risk).

Educational Incentive Overview

The TRB has approved the practice of providing an educational incentive for successful completion of certain professional certifications and reimbursement for related expenses associated with participating in these certification programs. As approved by the TRB, the administrative procedures will specify the administrative details and criteria including, but not limited to:

- Position eligibility
- Eligible certification programs
- Amount of pay differential
- Expense reimbursement

Recruitment Pay Overview

In order to attract highly skilled executives and investment staff, the TRB has approved the practice of providing a recruitment differential for external hires. As approved by the TRB, the administrative procedures will specify the administrative details and criteria including, but not limited to:

- Position eligibility
- Amount guidelines and maximum
- Payback provisions in the event of separation
- Authorized approvers

Relocation Overview

It is the TRB’s intent that individuals from outside State of California service who are newly appointed to positions covered under this policy, and who are required by CalSTRS to change their place of residence to accept employment be fairly compensated for relocation expenses. As approved by the TRB, the administrative procedures will specify the administrative details and criteria including, but not limited to:

- Position eligibility
- Eligible expenses
- Amount guidelines and maximum
- Payback provisions in the event of separation
- Authorized approvers

MODIFICATION, SUSPENSION AND TERMINATION

The TRB will regularly review the compensation program and will make changes as necessary to ensure the primary purpose of the compensation program is met.

Subject to the provisions of Education Code Section 22212.5 (and all related amendments), the TRB reserves the right to modify, terminate, and/or rescind any and/or all of the compensation schedules, provisions, policies, and procedures contained in this and all supporting documents at any time. This document describes a policy and does not provide a contract, guarantee of payment, or guarantee of employment between the TRB, CalSTRS, and the employees described in this document.

Adopted June 10, 2015

Amended June 7, 2017

800 BENEFITS AND SERVICES POLICY

A. Benefits Level

CalSTRS desires to expand and improve in a prudent manner the benefits and services provided through the funds it administers as appropriate for public retirement plans. Expanded benefits and services may be funded from available excess earnings of the System that the Board determines exist and can reasonably be relied upon to fund the expanded benefits and services. The Board has adopted the following principles, listed in priority order, for the evaluation of proposed benefits to be funded from excess earnings:

1. Protect the long-term stability of the Teachers' Retirement Fund while paying benefits to eligible members
2. Provide and maintain an adequate retirement allowance commensurate with each educator's career, with the goal of ultimately providing an equitable floor of benefits received by members
3. Treat similarly situated members uniformly
4. Equitably distribute benefit improvements funded from excess earnings between active and retired members, consistent with Principle #2
5. Improve access to affordable and adequate health care for members
6. Encourage the recruitment and retention of teachers through the improvement of retirement benefits

In addition, CalSTRS supports actions that would preserve the purchasing power of CalSTRS allowances so long as an appropriate funding source is identified.

B. Service Levels

Pursuant to Proposition 162, the Teachers' Retirement Board shall have the sole and exclusive fiduciary responsibility to administer the System in a manner that will assure prompt delivery of benefits and related services to the participants and their beneficiaries. Consistent with this responsibility, one of the goals of the Board is that the System's members be served in a prompt, accurate and efficient manner.

The Board recognizes that California statutes generally require benefits to be issued within 45 days of the application effective date or receipt of all necessary information. The Board also recognizes that interest penalties are paid to members when these timeframes are exceeded. The Board acknowledges that there are occasions when benefits cannot be processed within these timeframes but that exceptions should be kept to a minimum.

The Board therefore directs the CEO to maximize efforts to meet and possibly exceed statutory benefit processing timeframes, minimize interest penalty payments and provide services consistent with the expectations of its members. The Board, through the Benefits and Services Committee, receives a quarterly report from staff on the status of these requirements.

Adopted June 9, 2006

C. Guidelines for Consideration of Proposed Decisions in Appeals

The fiduciary duty imposed on the Teachers' Retirement Board (Board) requires that Board action is to be taken only with knowledge and understanding of the issue before it.

In those instances where a hearing has been granted and conducted before an Administrative Law Judge pursuant to Government Code Section 11517, a Proposed Decision is prepared by the Administrative Law Judge and presented to the Appeals Committee (Committee) for action. The Committee has been delegated the authority to act finally on these Proposed Decisions unless a Board member requests the matter be heard and decided by the full Teachers' Retirement Board.

The Committee is required to adopt the Proposed Decision as written or reject it and either send it back to the Administrative Law Judge to take additional evidence or decide the matter itself.

In recognition of its fiduciary obligation and statutory framework within which Proposed Decisions can be considered, the Board makes the following statement of policy for action on Proposed Decisions.

- A. The Deputy Chief Executive Officer (DCEO) in benefits appeals and the Audit Services Director in audits appeals shall recommend to the Committee the adoption of a Proposed Decision as its own when, in the opinion of the DCEO or Audit Services Director, it adequately reflects the issues and evidence presented at the hearing and the determination of the issue is adequately supported within the body of the decision.
- B. The DCEO or Audit Services Director may recommend action other than adoption of any Proposed Decision which does not meet the above standards.

In considering whether or not such recommendation is to be made, the staff is to consider the following, where appropriate:

1. The significance of any erroneous statement of law or factual determination in the Proposed Decision.
2. The significance of the omission of any applicable law citation or factual information.

3. The presence of actual or potential “program abuse” which should be a matter of Board concern and public discussion, but which is not visible from the Proposed Decision.
4. Whether or not, after reading the transcript of the hearing, the Proposed Decision is supported by the substantial weight of the testimony presented at the hearing. Such review will be made when feasible, and in the opinion of staff, it is an important element in considering a recommendation of rejection or a referral back to the Administrative Law Judge for the taking of additional evidence.

Adopted June 9, 2006

Revised Citation Clerical Error Education Code Section 22217, to Government Code Section 11517, February 16, 2012

D. Designating Precedential Decisions

Upon recommendation from the Assistant General Counsel, the Appeals Committee may designate an administratively adjudicated decision or part of an administratively adjudicated decision, adopted by the Appeals Committee pursuant to the standards set forth in the Administrative Procedures Act, as a Precedential Decision when the following criteria are met:

1. The decision or part of the decision contains a significant legal or policy determination;
2. The decision or part of the decision reflects a rule of general application; and
3. The decision or part of the decision relates to a legal or policy issue that is likely to recur in the future.

After the Appeals Committee has designated a decision as a Precedential Decision, the following statement shall be attached to the bottom of the decision: “Pursuant to Government Code section 11425.60, this decision [or “the following part of this decision”] is designated as a Precedential Decision.” If only a portion of the decision is designated as a Precedential Decision, this statement should end with a colon and then specify which part is designated as a Precedential Decision.

The Precedential Decision shall be added to an index containing all of CalSTRS’ Precedential Decisions. This index shall be updated not less frequently than annually, unless there have been no Precedential Decisions designated since the last update. The index shall be made available to the public on the CalSTRS website and its availability shall be publicized annually in the California Notice Registry.

Once a decision or part of a decision has been designated as a Precedential Decision, it is binding in future administrative adjudications unless the Appeals Committee has rescinded the designation.

Adopted April 10, 2013

E. Specified Interest and Contribution Rates and Lump-Sum Death Benefit

The Teachers' Retirement Law requires the board to set specified interest and contribution rates and the lump-sum death benefit amounts. This section covers the policies surrounding setting those rates and benefit amounts. The following interest, contribution rates and benefit amounts are set by board.

1. Regular Interest Rate – Defined Benefit Program
2. Credited Interest Rate – Defined Benefit Program
3. Minimum Interest Rate – Cash Balance Benefit Program
4. Minimum Interest Rate – Defined Benefit Supplemental Program
5. Employer Contribution Rate for Elected Officials of Employee Organizations
6. Employer Contribution Rate for Reduced Workload Program
7. Permissive Service Contribution Rates – Defined Benefit Program
8. Lump Sum Death Benefit for Active and Retired Members

1. Regular Interest Rate– Defined Benefit (DB) Program

The "Regular Interest Rate" is used by the DB Program to charge interest among other items on (1) previously refunded retirement contributions when a member elects to redeposit those contributions, and (2) installment payments for the (a) redeposit of contributions or (b) purchase of additional service credit. This rate is also used to charge employers interest on delinquent contributions and for reporting penalties. Section 22162 of the Education Code specifies that, beginning July 1, 2010, "Regular Interest Rate" means an interest rate that is equal to the actuarially assumed rate of return on investments on assets of the DB Program and is adopted annually by the board with respect to the DB Program.

- a. The board shall adopt the regular interest rate annually with the goal of adopting the rate before July of the fiscal year in which the rate applies.
- b. The regular interest rate adopted shall be equal to the actuarially assumed rate of return on investments.

2. Credited Interest Rate– Defined Benefit (DB) Program

Credited interest, as defined by Section 22120 of the Education Code, is interest that is credited to members' accounts at a rate set annually by the board. The credited rate is based on two-year U. S. Treasury rates with a maximum and minimum on the rate.

- a. The board shall adopt the credited interest rate annually with the goal of adopting the rate before July of the fiscal year in which the rate applies.
- b. The credited interest rate adopted shall be equal to average amount paid on two-year U. S. Treasury notes for the previous twelve months, rounded to the next highest basis point.

3. Minimum Interest Rate– Cash Balance (CB) Benefit Program

The “Minimum Interest Rate”, as defined by Section 26131 and applied by Section 26604 of the Education Code, with respect to the CB Benefit Program “... means the annual rate determined for the plan year by the board by means of an amendment to the plan...” This rate is used to credit interest to employee and employer account balances. The Minimum Interest Rate for the CB Benefit Program is based on the average rate for 30-year U.S. Treasury notes during the 12-month period ending in the February immediately preceding the plan year.

- a. The board shall adopt the minimum interest rate for the CB Benefit Program annually with the goal of adopting the rate before July of the fiscal year in which the rate applies.
- b. The minimum interest rate for the CB Benefit Program adopted shall be equal to average amount paid on 30-year U. S. Treasury notes for the previous twelve months, rounded to the next highest basis point.

4. Minimum Interest Rate– Defined Benefit Supplement (DBS) Program

The “Minimum Interest Rate”, as defined by Section 22146.7 of the Education Code, with respect to the DBS Program “... means the annual interest rate determined by the board by plan amendment at which interest shall be credited to the DBS accounts for a plan year.” In addition, Section 25005(b) states that “The minimum interest rate shall not be less than the rate at which interest is credited under the DB Program.” The Minimum Interest Rate for the DBS Program is based on the average rate for 30-year U.S. Treasury notes during the 12-month period ending in the February immediately preceding the plan year.

- a. The board annually shall adopt the minimum interest rate for the DBS Program with the goal of adopting the rate before July of the fiscal year in which the rate applies.
- b. The minimum interest rate for the DBS Program adopted shall be equal to average amount paid on 30-year U. S. Treasury notes for the previous twelve months, rounded to the next highest basis point. The rate shall not be less than the credited interest rate credited to the DB Program.

5. Employer Contribution Rate for Elected Officials of Employee Organizations

The "Employer Contribution Rate for Elected Officials" is used to charge the employer for service credit granted to a member for an approved leave of absence to serve as an elected official of an employee organization. The maximum amount of service credit that may be granted for service as an elected official of an employee organization is 12 years. Due to the passage of PEPRA, CalSTRS DB Program has two benefit structures, 2% at 60 and newer 2% at 62 and both require a policy for setting the contribution rate.

- a. The board shall adopt the employer contribution rate for elected officials of an employee organization annually with the goal of adopting the rate before July of the

fiscal year in which the rate applies. The board shall adopt a separate rate for members under the CalSTRS 2% at 60 and 2% at 62 benefit structures.

- b. The employer contribution rate for elected officials of employee organizations shall be the greater of (1) the normal cost of the member's benefit structure, less the member's contribution or (2) the employer contribution rate in effect for all other service credit. This amount will change with increasing employer contribution rates.

6. Employer Contribution Rate for Reduced Workload Program

The "Employer Contribution Rate for Reduced Workload Program" is used to charge the employer for service credit granted to a member who participated in the Reduced Workload Program. Due to the passage of PEPRA, CalSTRS DB Program has two benefit structures, 2% at 60 and newer 2% at 62 and both require a policy for setting the contribution rate.

- a. The board shall adopt the employer contribution rate for Reduced Workload Program annually with the goal of adopting the rate before July of the fiscal year in which the rate applies. The board shall adopt a separate rate for members under the CalSTRS 2% at 60 and 2% at 62 benefit structures.
- b. The employer contribution rate for elected officials Reduced Workload Program shall be the greater of (1) the normal cost of the member's benefit structure, less the member's contribution or (2) the employer contribution rate in effect for all other service credit. This amount will change with increasing employer contribution rates.

7. Permissive Service Credit Purchase Rates

Sections 22810 and 22117 of the Education Code require the board to set the rate for the purchase of service purchases. The rate shall be based on the most recent actuarial valuation and include any subsequent required contributions needed to fund future benefit increases. Currently the board adopts rates based on the latest actuarial valuation and a study of the previous purchases.

- a. At least annually, but more often if the board so decides, the board shall adopt separate rates for the purchase of permissive service credit for members under both the CalSTRS 2% at 60 and 2% at 62 benefit structures with the goal of adopting the rates before July of the fiscal year in which the rate applies. The board shall adopt a separate rate for members under the CalSTRS 2% at 60 and 2% at 62 benefit structures.
- b. The contribution rate shall be individual rates for each year of age, with a single rate for the ages below age 28 and a single rate for age 73 and above. The contribution rate shall be rounded to the nearest tenth of a percentage point.
- c. The rates for permissive service shall be based on a recommendation from staff after an actuarial study of permissive credit service purchases have been completed. The actuarial study shall be based on the latest actuarial valuation of the DB Program.

8. Lump Sum Death Benefit for Active and Retired Members

A one-time lump sum death payment is payable to the beneficiary upon the death of an active or retired DB Program member under certain conditions specified in statute. Sections 23801, 23851 and 23880 permit the board to adjust the death payment amount following each actuarial valuation based on changes in the All Urban California Consumer Price Index". The board adopts the benefit amounts after the latest actuarial valuation and upon recommendation from its consulting actuary.

- a. The board shall adopt lump sum death benefit amounts for members of the DB Program annually with the goal of adopting the benefit amounts before July of the fiscal year in which the rate applies. The board shall adopt separate death benefit amounts for active Coverage A members, all retired members, and active Coverage B members. The board shall adopt the same benefit amount for Coverage B members under both the CalSTRS 2% at 60 and 2% at 62 benefit programs.
- b. The adoption of the benefit amount shall be based on the latest actuarial valuation and a recommendation from its consulting actuary.

Adopted November 6, 2014

F. ACTUARIAL VALUATIONS OF THE DEFINED BENEFIT PROGRAM

The board shall commission an actuarial valuation of the Defined Benefit (DB) Program annually, using the most recently adopted demographic and economic assumptions, including the period of time over which gains and losses that differ from assumed investment return are recognized and the actuarial cost method (different actuarial cost methods may be used depending on the purpose of the liability calculation). Such assumptions and methods shall be reviewed and adopted every four years, but assumptions and methods may be reevaluated more frequently if the board determines that events since the last adoption warrant an earlier review.

1. Conducting Valuations

- a. Actuarial valuations shall be undertaken to determine the current and long term fiscal status of the DB Program and establish state and employer contribution rates pursuant to Chapter 16 of Part 13 of Division 1 of the Education Code.
- b. The valuation shall be consistent with the Actuarial Standards of Practice and shall, among other indicators, unfunded liability and the funded status of the DB Program.

2. Determining State Contributions

- a. Pursuant to Section 22955.1 of the Education Code, the state's contribution rate shall be subject to adjustment annually, commencing in 2017-18, in an amount necessary to fully amortize the unfunded liability by June 30, 2046, associated with the benefit and contribution structure in effect as of July 1, 1990, except as provided in 2f.
- b. The assets associated with this unfunded liability will reflect the additional contributions due to the increases in the state contribution rate designated to amortize this unfunded liability.
- c. The board shall reevaluate the target date for amortizing the unfunded liability in 2025.
- d. If an increase in the state's contribution rate is required, the increase shall not exceed 0.50 percent of the creditable compensation upon which members' contributions to the DB Program are based during the fiscal year ending in the immediately preceding calendar year, as reported pursuant to Section 22955.5 of the Education Code.
- e. The contribution rate for the 1990 Benefit Structure, when combined with the employer contribution rate imposed pursuant to Section 22950.5, shall not exceed the contribution rate needed to amortize the unfunded liability for the total DB Program.
- f. Subject to the limitation in 2d, after July 1, 2017, the state's contribution rate pursuant to Section 22955.1 shall not be less than 4.311 percent of the creditable compensation upon which members' contributions to the DB Program are based if there is an unfunded liability associated with the benefit and contribution structure in effect as of July 1, 1990.

3. Determining Employer Contributions

- a. Pursuant to Section 22950.5 of the Education Code, the employer's contribution rate shall be subject to adjustment annually, commencing in 2021-22, in an amount necessary to fully amortize by June 30, 2046, the unfunded liability associated with the changes made in the benefit and contribution structure on or after July 1, 1990, associated with the service credited to members as of June 30, 2014.
- b. The assets associated with this unfunded liability will exclude future contributions equal to the Normal Cost for post-June 30, 2014 benefit accruals and will include a one-time adjustment equal to the difference between the June 30, 2014, actuarial obligation under the projected unit credit cost method and the actuarial obligation under the valuation cost method.
- c. If an adjustment in the employer's contribution rate is required after determination of the state contribution rate, the adjustment shall not exceed 1.00 percent of the creditable compensation upon which members' contributions to the DB Program are based, unless the unfunded liability has been eliminated.

- d. In no event shall the total contribution rate imposed pursuant to Section 22950.5 exceed 12.00 percent of the creditable compensation upon which members' contributions to the DB Program are based.
- e. If there is a surplus (i.e., a negative unfunded liability associated with the benefit and contribution structure in effect as of July 1, 1990 for service accrued prior to July 1, 2014, the employer contribution rate, when combined with the state contribution imposed pursuant to Section 22955.1, shall not exceed the contribution rate needed to amortize the unfunded liability attributable to service accrued prior to July 1, 2014, subject to the limitations described in 3c and 3d.
- f. The employer contribution rate, when combined with the state contribution rate imposed pursuant to Section 22955.1, shall not be less than the contribution rate needed to amortize the unfunded liability attributable to service accrued prior to July 1, 2014, subject to the limitations described in 3c and 3d.

4. Determining Member Contributions

- a. Member contributions shall be equal to the rates specified in Chapter 15 of Part 13 of Division 1 of the Education Code, and are not subject to adjustment by the board, except as provided in 4b.
- b. For members subject to the California Public Employees' Pension Reform Act of 2013, the member contribution rate shall be adjusted if the normal cost rate increases or decreases by more than 1.00 percent of the creditable compensation upon which members' contributions to the DB Program are based above or below the normal cost rate in effect at the time the percentage is first established or, if later, the normal cost rate in effect at the time of the last adjustment.

Adopted June 9, 2016

G. ACTUARIAL VALUATIONS OF THE DEFINED BENEFIT SUPPLEMENT PROGRAM AND THE CASH BALANCE BENEFIT PROGRAM

1. Additional Earnings Credit

In awarding an additional earnings credit as a plan amendment pursuant to sections 25006 and 26605 of the Education Code, the following policy shall apply:

- a. No credit shall be awarded if the ratio of the market value of assets to the actuarial liability is less than or equal to the sum of 100 percent and one standard deviation of the assumed annual rate of investment return, as determined in the most recently adopted Actuarial Experience Study, rounded to the nearest one-tenth of one percent.

- b. If the ratio of the market value of assets to liabilities exceeds the sum of 100 percent and one standard deviation of the assumed annual rate of investment return, as determined in the most recently adopted Actuarial Experience Study, rounded to the nearest one-tenth of one percent, an additional earnings credit shall be awarded as a percentage of the member's balance of credits, equal to the lesser of:
1. The difference between the assumed annual rate of investment return and the minimum interest rate for the valuation year and
 2. A percentage such that the resulting ratio of the market value of assets to liabilities, after the awarding of the additional credit, is equal to the sum of 100 percent and one standard deviation of the assumed annual rate of investment return, rounded to the nearest one-tenth of one percent.

- c. If, after the award of credits as described above, the ratio of the market value of assets to the actuarial liability exceeds the sum of 100 percent and two standard deviations of the assumed annual rate of investment return, as determined in the most recently adopted Actuarial Experience Study, rounded to the nearest one-tenth of one percent, the additional earnings credit shall be increased by an amount equal to a percentage such that the resulting ratio of the market value of assets to liabilities is equal to the sum of 100 percent, two standard deviations of the assumed annual rate of investment return, as determined in the most recently adopted Actuarial Experience Study and 50 percent of the ratio of the market value of assets to the actuarial liability in excess of two standard deviations of the assumed annual rate of investment return, as determined in the most recently adopted Actuarial Experience Study, rounded to the nearest one-tenth of one percent. For example, if the funded ratio after the first allocation is equal to 150% and 100% plus two standard deviations is 130%, the additional credits should be such that the resultant funded ratio is equal to 140% (130% plus 50% of the difference).
- d. For purposes of determining whether additional credits are awarded prior to the adoption of the Experience Study in 2016, one standard deviation of the assumed annual rate of investment return for the Defined Benefit Supplement Program shall be 13.9 percent, and for the Cash Balance Benefit Program, the standard deviation shall be 13.2 percent.
- e. The board shall award an additional earnings credit as a plan amendment to the Defined Benefit Supplement Program and the Cash Balance Benefit Program, as applicable, pursuant to a resolution adopted by the board no later than June 30 of the plan year for which the credit is being awarded.
- f. The additional earnings credit shall be applied to the member's balance of credits as of the date the resolution is adopted by the board.
- g. The additional earnings credit credited to the member's nominal account shall be based on all information concerning the balance of credits as of the end of the plan year that is known as of the date that the additional earnings credit is credited to the member's nominal account.

2. Additional Annuity Credit

In recognition that annuities are determined based on the assumed rate of investment return as of the benefit effective date, no additional annuity credits shall be awarded pursuant to sections 25007 and 26607 of the Education Code.

Adopted April 2, 2015

900 AUDITS AND RISK MANAGEMENT POLICIES

A. External Auditor Independence and Allowable Services

INDEPENDENCE

The purpose of this document is to define the standards of independence for the external auditor to be engaged by the CalSTRS Teachers' Retirement Board. These standards will meet or exceed standards proposed by professional accounting and auditing organizations.

“Independence” is a highly subjective term, because it concerns an individual's ability to act with integrity and objectivity. Integrity relates to an auditor's honesty, while objectivity is the ability to be neutral during the conduct of the engagement and the preparation of the auditor's report. Two facets of independence are independence in fact and independence in appearance. Public confidence would be impaired if the auditor actually lacked independence. That confidence would also be impaired if the public believed circumstances existed that might influence the auditor's independence. Independence, in fact, is impossible to measure, since it is a mental attitude.

The external audit firm engaged to perform a financial statement audit and/or other audit services shall be independent in fact and in appearance. The external audit firm engaged to perform the financial audit and/or other audit services shall not contemporaneously perform services that conflict with auditor independence. This policy statement is based on the principal that independence of the external auditor is paramount to ensure objectivity and to express an unbiased auditor's opinion.

The principles of independence with respect to services provided by the external auditors, are largely predicated on three basic principles, violations of which would impair the external auditor's independence: (1) an external auditor cannot function in the role of management, (2) an external auditor cannot audit his or her own work, and (3) an external auditor cannot serve in the advocacy role for his or her client.

To ensure external auditor's independence, this policy further explains the services that the external auditor is allowed to perform and services that the external auditor is not allowed to perform.

SERVICES THAT THE EXTERNAL AUDITOR IS ALLOWED TO PERFORM

The following items are within the scope of services that may be provided by the independent financial statement auditor, including its subsidiaries or affiliates. In general, these services to be provided are those that are provided in the Statements of Auditing Standards and the Statements of Standards for Attestation Engagements promulgated by the Auditing Standards Board of the American Institute of Certified Public Accountants.

1. Annual financial statements audit,
2. Preparation of draft financial statements that are based on management's chart of accounts and trial balance and including any adjusting, correcting, and closing entries that have been approved by management,

3. Required external auditor communications to management,
4. Presentation of audited financial statements to the Audits and Risk Management Committee,
5. Attest services,
6. Report to management and recommendations to management on internal control structure, risk management and/or accounting policies as a result of performing the audit and/or other allowed services,
7. Training when requested by CalSTRS program management,
8. Any other services approved by the Audits and Risk Management Committee and the Teacher's Retirement Board.

SERVICES THAT THE EXTERNAL AUDITOR IS NOT ALLOWED TO PERFORM

The independent financial statement auditor, including its subsidiaries and affiliates, shall not perform the following services for CalSTRS or any other services for CalSTRS that the TRB believes will impair auditor's independence while engaged to perform CalSTRS' financial statements audit. These non-audit services include:

1. Bookkeeping or other services related to the accounting records or financial statements of the audit client;
2. Financial information systems design and implementation;
3. Appraisal or valuation services, fairness opinions, or contribution-in-kind reports;
4. Actuarial services;
5. Internal audit outsourcing services;
6. Management functions
7. Human resources;
8. Broker or dealer, investment adviser, or investment banking services;
9. Legal services unrelated to the audit;
10. Expert services unrelated to the audit;
11. Tax Services under PCAOB Rules 3521, 3522(a) and 3523, and
12. Any other service that the TRB determines is impermissible.

UNDUE INFLUENCE

No member of the Teachers' Retirement Board or CalSTRS staff shall influence the auditors or the firm engaged to perform audit services and other allowed services. Therefore, no person associated with CalSTRS shall take any action to fraudulently influence, coerce, manipulate, or mislead the independent financial statement auditor. To the contrary, persons associated with CalSTRS shall promptly provide all information required for the auditor to perform the audit procedures and complete the audit and form an opinion on the CalSTRS financial statements.

Adopted September 7, 2005

1000 INVESTMENT POLICY

A. Investment Policy and Management Plan

EXECUTIVE SUMMARY

The California State Teachers' Retirement Board believes that to manage growth of assets in a prudent manner, it is necessary to establish a clear investment policy and a planning statement in the form of an investment management plan under which the Investment Branch will operate. The Board has sole and exclusive fiduciary responsibility to administer the investment assets in a manner that will assure the prompt delivery of benefits and related services to the plan participants and their beneficiaries. As a public pension fund, the California State Teachers' Retirement System is not subject to ERISA, which governs corporate pension plans. The CalSTRS investment decision-making criteria are based on the "prudent expert" standard, for which the ERISA prudence standards serve as a basis. Additionally, the California Constitution, Article 16, Section 17, subsection (d) and Education Code Section 22250 (c) require diversification of risk across asset classes and minimization of employer costs.

The Investment Policy and Management Plan has been developed within the context of the significant events that have occurred during CalSTRS history. The CalSTRS Investment Policy and Management Plan is updated to reflect the changes that have occurred in the investment policy and strategy as a result of implementing approved programs. In addition, the Investment Policy and Management Plan is updated to ensure that the factors that have impacted initial decisions are still relevant in the current environment.

This document addresses general objectives governing the policies of the investment function and the specific performance objectives. The general objectives are meant to provide a framework for the operation of the investment function. CalSTRS' performance objectives can be divided into objectives, one for the overall investment function and one for the objectives for the investment managers.

The asset allocation decision governs the allocation of CalSTRS assets between public and private, and fixed income and equity. Strategic allocation of CalSTRS assets is the most important factor in the determination of the realized total rate of return. The Board, Investments staff, and the general consultants worked together to create a variety of optimal asset allocation alternatives. The Board has adopted the desired targets and set tight ranges around those targets to control risk and ensure the proper allocation of the portfolio.

Strategic asset allocation targets are established within a variety of sub-asset categories to achieve the identified performance objectives. In conjunction with the overall asset allocation targets, sub-asset class level tactical ranges provide flexibility to adapt to changing market conditions.

Subsequent to the establishment of strategic asset allocation targets, an investment structure was designed to guide and direct investment decisions. Investment related issues addressed included:

1. The Funds' overall investment objectives, risk tolerance, and performance standards
2. The relative amount of active and passive management within each asset class
3. The relative amount of internal and external management
4. The appropriate direct and indirect costs of each asset category
5. The appropriate reporting standards and time horizons

Additionally, CalSTRS is committed to holding and managing securities investments in both the public and private markets and exercising the corporate governance rights that are a necessary part of that ownership. CalSTRS views these rights as plan assets and discharges its fiduciary duty solely in the interest of the plan participants and their beneficiaries.

STANDARD OF CARE

Under California Constitution, Article 16, Section 17, and the California Education Code, Part 13 Teachers Retirement Law, Chapter 4, Section 22250, the Board has the sole and exclusive fiduciary responsibility over the assets of the retirement system. The Board shall also have sole and exclusive responsibility to administer the system in a manner that will assure prompt delivery of benefits and related services to the members and their beneficiaries. The assets of the retirement system are trust funds and shall be held for the exclusive purposes of providing benefits to participants in the pension or retirement system and their beneficiaries, and defraying reasonable expenses of administering the system.

The members of the Board of the retirement system shall discharge their duties with respect to the system solely in the interest of, and for the exclusive purposes of, providing benefits to members and their beneficiaries, minimizing employer contributions thereto, and defraying reasonable expenses of administering the system. The Board's duty to its members and their beneficiaries shall take precedence over any other duty.

The members of the CalSTRS Board shall discharge their duties with respect to the system with the care, skill, prudence, and diligence, under the circumstances then prevailing, that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.

GENERAL INVESTMENT OBJECTIVES

The main goal for The California State Teachers' Retirement System is to "maintain a financially sound retirement system". Within this context and in conjunction with the State Constitution and Education Code, the following general investment objectives are designed to establish a framework for the operation of the investment portfolio.

1. **Provide for Present and Future Benefit Payments** – The CalSTRS Investment Program shall: provide liquidity to pay benefits to its participants and their beneficiaries in the amounts and at the times called for through the investment of contributions and other fund assets, strive to meet the assumptions built into the actuarial model and strive to maintain a fully funded pension system.

2. **Diversify the Assets** – Seek to diversify the assets to achieve the desired rate of return at a prudent level of risk. The asset structure must provide for diversification of risk between asset classes in order to manage the risk/return relationship through strategic asset allocation.
3. **The Reduction of CalSTRS’ Funding Costs** – Within prudent levels of risk, the reduction of CalSTRS’ funding costs shall be a consideration in the organization and structure of the investment portfolio.
4. **Maintain the Trust of the Participants and Public** – Manage the investment program in such a manner that will enhance the member and public’s confidence in the CalSTRS Investment Program.
5. **Establish Policy and Objective Review Process** – A formal review of the CalSTRS Investment Policy and Management Plan will be conducted annually, with an updated financial projection developed every two years.
6. **Create Reasonable Pension Investments Relative to Other Pension Funds** – The selection of investment vehicles and policies will be judged against other private and public pension funds. Investment performance, asset management costs, staffing and overall expenses will be compared to other public and corporate pension plans, with special emphasis on comparisons with other large public funds.
7. **Minimize Costs** – Management fees, trading costs, and other expenses will be aggressively monitored and controlled.
8. **Compliance with State and Federal Laws** – The investment program must operate in compliance with all applicable State and Federal laws and regulations concerning the investment of pension assets.

INVESTMENT PERFORMANCE OBJECTIVES

The general investment objectives designed a framework for the operation of the investment function. The performance objectives can be divided into three components: (1) performance objectives for the overall Investment Portfolio, (2) performance objectives for each asset class, and (3) performance objectives for the individual investment managers within each asset class. CalSTRS incorporates all three levels of analysis in its monitoring of the investment portfolio performance.

In 2001, a survey of the Board members confirmed the Board’s primary objective is to meet the actuarial assumptions and to strive to maintain a fully funded pension plan. Further, the Board reaffirmed its focus on a long-term investment horizon of ten years. As a long-term pension plan, the Board emphasizes that the primary time horizon for measuring investment performance will be over a three, five, and ten year period rather than quarter to quarter or year to year.

There are five performance objectives identified for the overall Investment Portfolio:

1. Relative to the Actuarial Rate of Interest
2. Relative to CalSTRS’ Liabilities
3. Relative to Inflation
4. Relative to Strategic Asset Allocation Targets (Policy Benchmark Index)
5. Relative to the CalSTRS Reference Portfolio

The first objective identifies a comparative benchmark that reflects CalSTRS’ unique asset allocation policy. This performance objective is a composite of the target weighting for each asset category multiplied by the performance benchmark’s return for that category. This performance number is compared to the actual asset allocation and actual total rate of return. This comparison identifies the contribution or detriment to performance caused by manager performance, market timing, and tactical asset allocation decisions.

The inflation related objective compares the investment performance against the rate of inflation as measured by the Consumer Price Index plus 3.5 percent. The Consumer Price Index is used in the calculation of the estimated salary increases for the members (teachers). The inflation measure provides a link to CalSTRS’ liabilities.

The actuarial rate of interest is reviewed and monitored as a measure of the long-term rate of growth of CalSTRS assets. The current actuarial rate of interest is 7.0 percent. When adopting the actuarial rate of interest, the Board anticipates the investment portfolio may achieve higher returns in some years and lower returns in other years.

The liability related performance objective recognizes that liabilities must be paid in full and in a timely manner. The liabilities are future claims of the CalSTRS participants. The actuarial rate of interest is used to discount the future value of the CalSTRS liabilities to calculate the funded ratio.

PERFORMANCE BENCHMARKS

To facilitate the periodic reporting to the Investment Committee and to provide a relative measure to gauge success, custom performance benchmarks are approved by the Investment Committee. The approved custom performance benchmarks for each asset class are shown below:

<u>Total Public Global Equity</u>	Weighted blend of the Russell 3000 Custom Index ¹ + MSCI All Country World Index (ACWI) ex-U.S Custom Investable Market Index (IMI) ¹
U.S. Equity	Russell 3000 Custom Index ¹
Non-U.S. Equity	MSCI ACWI ex-U.S. Custom IMI ¹
<u>Total Public Debt</u>	(95%) Bloomberg Barclays U.S. Aggregate Custom Index ¹ + (5%) Bloomberg Barclays U.S. High Yield 2% Issuer Capped Custom Index ¹
U.S. Core	Bloomberg Barclays U.S. Aggregate Custom Index ¹
U.S. Core Plus Debt	Bloomberg Barclays U.S. Universal Custom Index ¹
High Yield Debt	Bloomberg Barclays U.S. High Yield 2% Issuer Capped Custom Index ¹
<u>Inflation Sensitive</u>	Weighted blend of the Bloomberg Barclays U.S. Government Inflation Linked Bond Index, Bloomberg Commodity Index, Alerian MLP Daily index and CPI+4% (quarter lagged) ²

<u>Real Estate</u>	NCREIF ODCE Value Weighted index Net of fees (quarter lagged)
<u>Private Equity</u>	Weighted blend of the CalSTRS Custom Private Equity Index and Custom Tactical Index (both quarter lagged) ²
<u>Risk Mitigating Strategies</u>	Weighted blend of: Bloomberg Barclays U.S. Treasury 20+year Total Return Index, SG Trend Index, HFRI Macro: Discretionary Thematic Index, and Eurekahedge Multi-Factor Risk Premia Index. Once the asset class is fully implemented, target weights of each underlying strategy will be applied to the custom benchmark, as described in the RMS policy. ²

¹ Custom public indices are updated quarterly in accordance with the CalSTRS restricted securities list. Russell and Bloomberg Barclays indices exclude tobacco, illegal CA firearms, geopolitical and U.S. thermal coal companies. MSCI indices exclude tobacco, illegal CA firearms and geopolitical companies.

² As new strategies are added, the future benchmark shall be a dynamic blend comprised of the weightings of each of the underlying strategies within the portfolio, multiplied by their respective benchmarks. The Investment Policy and Management Plan will be updated accordingly through a schedule set forth by the Board.

Blended indices are weighted based upon CalSTRS target allocations to each respective index. Each investment manager, in all asset classes, has an individualized benchmark designed to measure its performance relative to the objective identified in each manager's respective investment guidelines.

TOTAL FUND BENCHMARK

To measure the performance of the Total Fund, CalSTRS utilizes two benchmarks as described below. One primarily for members and the public and one customized for internal performance attribution and risk management.

Policy Benchmark Index - This measure is used for performance attribution and risk measurement. It is developed by taking each of the respective asset classes custom benchmarks weighted by the policy target asset allocation at the end of the specific time period. Since almost all of the asset class benchmarks are customized for CalSTRS exclusions and special mandates, they are not publicly available. Additionally, because the Total Fund utilizes long term illiquid securities, benchmark comparisons become difficult over shorter time periods. Many of the illiquid asset classes are not investible options for the members and public.

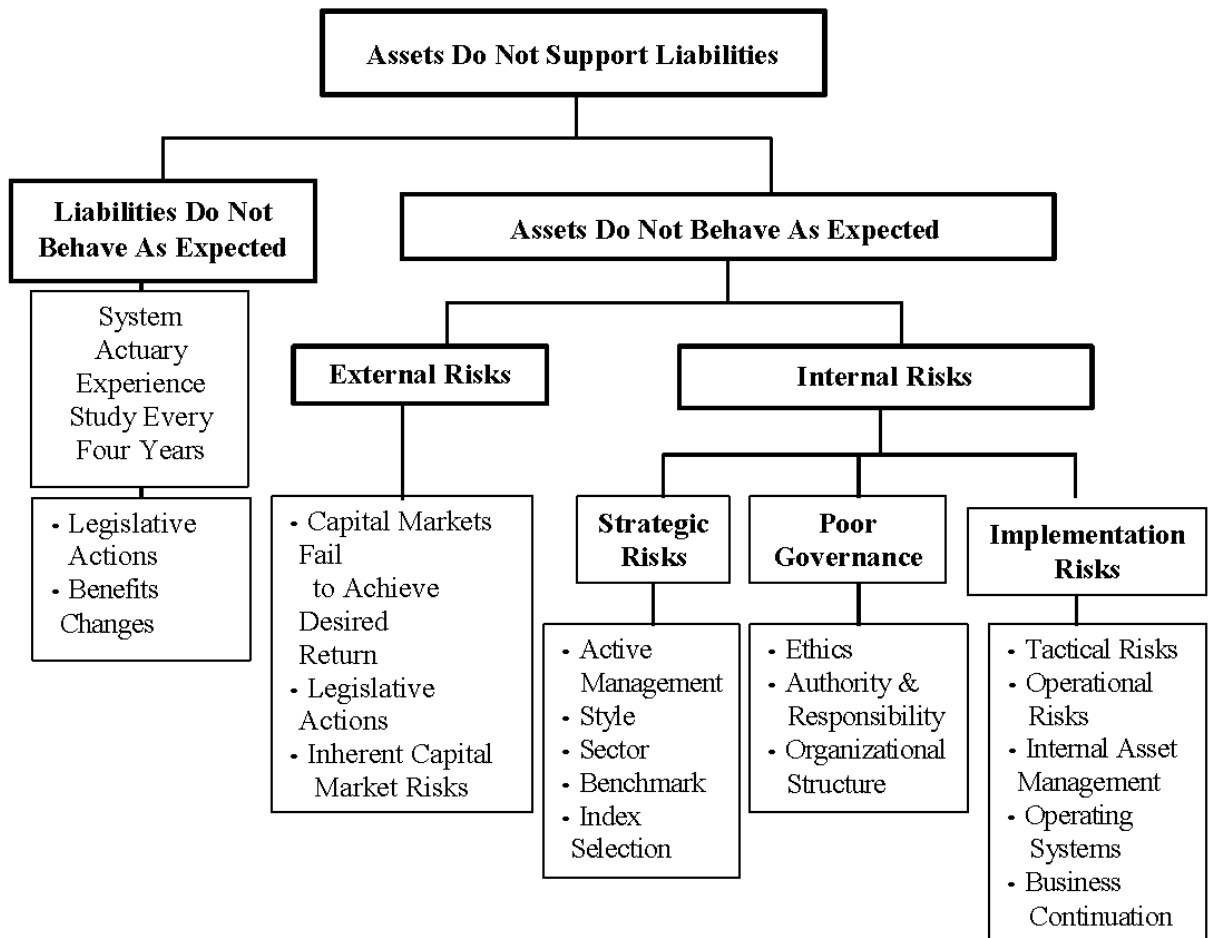
Reference Portfolio - The reference portfolio is the Morningstar Moderate Target Risk index which is designed to help measure Target date mutual funds with a long investment horizon and risk level very similar to that of the CalSTRS total fund. This measure is designed to allow members and the public compare the CalSTRS total fund Investment performance to a similar risk level portfolio they could utilize within the personal retirement accounts. This measure will be used in external publications to provide comparison that is publicly available and clearly defined. The Reference Portfolio is also the most appropriate performance measurement tool to measure the performance success of the over long time periods.

RISK CONSTRAINTS

The CalSTRS Investment Portfolio will be invested to maximize return at a prudent level of risk in accordance with the CalSTRS Investment Policy and Management Plan, the California Constitution and the California Education Code.

RISK STANDARDS

With a few enhancements, CalSTRS has utilized the risk matrix *Statements of Key Investment Risk and Common Practices to Address Those Risks, June 2000*, which is endorsed by the NCTR¹, GFOA², and APPFA³. These standards promulgate the CalSTRS risk framework which is listed below:



¹ National Council on Teacher Retirement;
² Government Finance Officers Association
³ Association of Public Pension Fund Auditors

External Risk - External risks are embedded and inherent within the capital markets. This policy defines CalSTRS strategy and process to capture or, in turn, mitigate these risks.

Governance Risk - Governance risk is mitigated within the Board’s governance policy and the individual asset class policies. Roles and assignments are clearly stated in each policy.

Strategic Investment Risks & Implementation Risks – These particular risks have increased significantly over time, as a result, the Investment Committee has revised the strategies to tactically manage the risks of the portfolio. CalSTRS has adopted six key risk measures to help identify potential deviations in global risk levels.

Global Economic Growth Risk	Interest Rate Risk	Inflation Risk	Liquidity – Fluid Market Risk	Leverage Financing Risk	Global Investment Governance Risk
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These risks overlay the total portfolio and touch almost each asset class in one way or another. Management of these risks requires comprehensive strategies across the portfolio.

This policy is designed to mitigate the strategic investment risks and implementation risks of the investment activity. A critical element to mitigate these risks is the asset allocation and sub-asset structure of each asset class. The Board has adopted target allocations and tight ranges to control and limit the strategic and tactical risks in the portfolio. To control the active manager style, sector, index and benchmark risks, the Board has delineated guidelines and structure through the asset allocation plan and the asset class policies and guidelines.

Environmental, Social and Governance Risks, ESG – CalSTRS Investment Portfolio operates in a unique and complex social-economic milieu, and the Board expects its staff and investment managers to select investments after a careful investigation and deliberation of the risks versus the potential return. To assist staff and investment managers, the Board has promulgated a partial list of risks to be considered that are of particular concern to CalSTRS. This list and the ESG Policy are included as Attachment A to this policy.

RISK BUDGET

The CalSTRS Asset Allocation Plan is developed within the concept of a risk budget. In CalSTRS’ view, the public markets of U.S. equity, U.S. fixed income and, to a lesser extent, non-U.S. equity, are fairly efficient markets. Information is disseminated quickly and new information is quickly absorbed into the market prices of a given security. As a result, CalSTRS utilizes a more passive management style. The less efficient the investment the greater exposure to active management and hence the larger exposure to style, sector and management risk.

In the less liquid and inefficient asset classes of high yield fixed income, private equity, infrastructure and real estate, CalSTRS utilizes a complex active management style to capture the greater opportunity set offered by the larger risks.

TOTAL FUND RISK

Liquidity Risk

No more than 35 percent of the total fund shall be invested in instruments that are not regularly publicly traded on a daily basis.

Maximum Investment

No more than 3 percent of the total fund shall be invested or exposed to any one security or corporation, with the exception of the United States Treasury or Agency Obligations. No more than 15 percent of any asset class may be invested in any one security, with the exception of United States Treasury or Agency Obligations.

ASSET ALLOCATION

The Asset Allocation Process

The key goal of the asset allocation process is to develop an asset allocation policy that maximizes the likelihood that an investment portfolio's assets will, over the planning horizon, fund plan benefits.

Steps Involved in Setting Asset Allocation Policy

Overview and Planning Steps

1. Review rationale for policy
 - A. Importance of diversification
2. Review financial condition of plan
 - A. Assets versus projected liabilities (balance sheet)
 - B. Projected contributions versus projected benefits

Investment Related Steps

3. Review rationale for investment asset classes in light of plan financial requirements
4. Develop expectations for asset class investment performance (returns, risks, correlations)
5. Identify investor-specific constraints that might limit investment strategies (e.g., liquidity)
6. Create model portfolios, incorporating objectives, assumptions, and constraints
7. Isolate investor-specific model portfolio to represent an investor's asset allocation policy
8. Perform additional sensitivity analyses to quantify impact of specific issues
 - A. Adjustments to required rate of return
 - B. Shift in financial condition of the plan due to funding

CalSTRS will conduct an asset/liability study on a three year cycle or more frequently if there is a significant change in the liabilities or assets. During the asset allocation study, a comprehensive review of the financial condition of the plan becomes imperative. A key component of reviewing

the plan's financial condition is studying the actuarial requirements of the plan. These include the future liabilities and expected cash flow of contributions less benefit payments. For example, over the next decade, CalSTRS expects to see a negative cash flow as more participants retire. These requirements represent CalSTRS' long-term liabilities and, when combined with the CalSTRS Investment Portfolio, constitute the pension plan's balance sheet.

Understanding what factors (such as changes in interest rates, benefit structures, and plan demographics) influence these liabilities is important. Changes in these and other underlying factors may, in fact, alter a plan's liability structure. Such shifts could, in turn, impact the plan's financial condition. CalSTRS' factors were studied and considered as part of this asset allocation review.

Selecting Asset Classes for Portfolio Investment

As discussed earlier, there are three components required to model investment returns: (1) asset class expected returns, (2) asset class risks, and (3) correlations among asset classes. Investment consultants develop these components, which are then used to develop efficient frontiers quantitatively.

Total Return and Risk Estimates

* Assumed inflation level: 3.0% per year Adopted in JUNE 2015

Asset Class	Expected Annual Return	Expected Risk (Annualized SD)⁴
Cash/Liquidity	2.00	2.0
Fixed Income	3.30	6.0
Inflation Sensitive	6.8	11.3
Global Equity	9.30	19.1
Private Equity	12.30	25.0
Real Estate	8.2	14.0
Risk Mitigating Strategies (RMS)	5.9	11.3
TOTAL FUND	7.4	13.0

Correlation Among The Asset Classes:

	Global Equity	Fixed Income	Inflation Sensitive	Private Equity	Real Estate	RMS
Global Equity	1.00					
Fixed Income	0.06	1.0				
Inflation Sensitive	0.38	0.36	1.00			
Private Equity	0.82	-0.23	0.28	1.00		
Real Estate	0.53	0.03	0.26	0.60	1.00	
RMS	0.09	0.54	0.14	-0.28	-0.03	1.00

**These return and volatility estimates are only for asset allocation modeling purposes. The Investment Committee has not authorized their use for liability modeling purposes.*

⁴ SD – Standard Deviation

These returns and volatility estimates reflect several basic relationships:

1. Investors or lenders of capital require an incremental real return premium as a reward for making capital available
2. Equity-oriented investments should, over long periods, produce return premiums that are higher than their fixed income counterparts
3. The return assumptions for the publicly traded asset classes do not account for added value opportunities within each asset class

Review of Asset Allocation Policy

Over the last thirty years, CalSTRS' asset allocation policy has shifted modestly.

CalSTRS Asset Allocation Policy Trends (in %)

Asset Class/Strategy	Long-Term*	2015	2013	2008	1999	1993	1986
U.S. Equities	23	37	34	40	38	33	40
Non-U.S. Equities	24	18	17	20	25	18	15
Public Global Equity	47	55	51	60	63	51	55
Real Estate	13	13	13	11	5	10	10
Private Equity	13	13	13	9	5	7	5
Total Equity	73	81	77	80	73	68	70
Global TAA	0	0	0	0	0	1	0
Inflation Sensitive	4	1	6				
Fixed Income	12	17	16	20	26	30	30
Cash	2	1	1	0	1	1	0
Risk Mitigating Strategies	9	0					
Innovative Strategies	0						
Total Diversifying	27	19	23	20	27	31	30
Total	100	100	100	100	100	100	100

* The long-term target was established in November 2015.

CalSTRS' investment policy has remained consistent from an equity/stable asset allocation viewpoint. In 1986, CalSTRS had a strategic allocation of 70 percent equities and 30 percent stable assets. In 1997, CalSTRS' board adopted and reaffirmed a policy of 73 percent equity and 27 percent stable assets. During the 2006 Asset Liability Study, the Investment Committee approved a shift to a long-term plan of 80 percent equity and 20 percent stable assets to optimize the likelihood of success in meeting the investment goals listed at the beginning of the policy. In 2009, the Investment Committee added a new asset group, Inflation Sensitive, to help improve the overall diversification and reduce volatility. Lastly, in 2015, the Committee added Risk Mitigating Strategies to reduce the risk of decline in significant negative investment periods.

STRATEGIC ASSET ALLOCATION

CalSTRS' asset allocation strategy utilizes a design for today's needs, while anticipating the future capacity and growth of the investment portfolio. A strategic asset allocation target for each asset class was first established in 2001, and has been revised with each subsequent asset allocation study based upon a comprehensive asset allocation analysis completed by Pension Consulting Alliance. In conjunction with the strategic target, a range for each asset category has been established to provide flexibility designed to reduce rebalancing costs and to allow flexibility to adapt to changing market conditions.

To control the risk and return relationship, each asset category should be rebalanced to the strategic target. Rebalancing latitude is important and can significantly affect the performance of the portfolio. Blind adherence to narrow ranges increases transaction costs without a documented increase in performance. A rebalancing range that is too wide may cause undesired changes in the asset allocation. The ranges are based upon the allowed variation in the overall risk profile of the entire portfolio.

CalSTRS Long-term Policy Target and Ranges

	Long-Term Target	Range
Global Equity	47%	+/- 6%
Private Equity	13%	+/- 3%
Real Estate	13%	+/- 3%
Total Equity	73%	
Inflation Sensitive	4%	+/- 3%
Fixed Income	12%	+/- 3%
Cash	2%	+/- 3%
Risk Mitigating Strategies	9%	+/- 3%
Innovative Strategies	0%	+/- 3%
Total Diversifying	27%	
Total Asset Allocation	100%	

Please note that the allocated, but not funded, portion of Private Equity and Real Estate will be invested in accordance with the Strategic Asset Allocation Plan.

With the creation of the Inflation Sensitive asset class in 2010, and the Risk Mitigating Strategies asset class in 2016, CalSTRS will build up these new portfolios as attractive investment opportunities and time permit. To integrate the new asset classes, CalSTRS has adopted the following implementation plan commencing in 2016. Every six months the asset mix will be revisited and the policy benchmark/allocation may be shifted to the next step if warranted and approved by the Investment Committee.

Revised CalSTRS Long-term Policy Target and Ranges

Strategic Class	Asset Class/Strategy	Effective 1/1/17 Step 1	Effective 6/30/17 Step 2	Effective 1/1/2018	Potential next Step 3	Potential next Step 4	Long-Term Target
Equity & Growth	Global Equity	56%	55%	54%	53%	51%	47%
	Private Equity	9%	8%	8%	9%	10%	13%
Real Assets & Inflation	Real Estate	13%	12%	12%	13%	13%	13%
	Inflation Sensitive	1%	2%	2%	2%	3%	4%
Risk Mitigating	Innovative Strategies	0%	0%	0%	0%	0%	0%
	Risk Mitigating Strategies	3%	6%	9%	9%	9%	9%
Fixed Income	Fixed Income	16%	15%	13%	12%	12%	12%
	Cash / Liquidity	2%	2%	2%	2%	2%	2%
Total Asset Allocation		<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>	<u>100%</u>

Rebalancing Procedure: The asset mix may deviate from the target as shown above. Deviations greater than described may require rebalancing within the range. The range around the allocation targets is intended to keep the actual allocation close to the target while minimizing the transaction costs that result from rebalancing.

1. The Board delegates to the chief investment officer authority to rebalance the asset allocation across asset classes/strategies when market values of assets fall outside policy ranges and to shift allocations within the ranges. Rebalancing and shifts will be accomplished first using normal cash flows and second through reallocation of assets across asset classes. The timing of the rebalancing and shifts will be based on market opportunities and the consideration of transaction costs, and therefore need not occur immediately. The global financial markets and fund conditions are dynamic, not static. The optimum shift in assets will depend on market volatility and costs. The above policy ranges are long-term and may deviate in the short-term as a result of funding schedules, interim market movements and market impact costs of implementation.
2. Idle cash will be allocated to asset classes and investment managers based on target allocations.
3. The Board authorizes the chief investment officer to shift assets in a timely, prudent and cost efficient manner within the policy ranges and in order to maintain the policy ranges established by the Board. The Board further authorizes the chief investment officer to utilize futures, forward contracts, and options for a temporary period, in order to maintain target range exposure in asset classes and to reduce transaction costs that would otherwise be incurred by the buying and selling of actual securities. Rebalancing can occur to bring asset classes within their target ranges or when there is transition between investment

managers. The CIO will promptly report any re-balancing to the Board at the next Investment Committee meeting.

4. Rebalance Within Asset Classes: the Board authorizes the chief investment officer to rebalance within each asset class by first using normal cash flows and second through the reallocation of assets within asset classes. This reallocation will be based on individual policies and guidelines for each asset class.
5. Because of appraisal valuation and the illiquid market nature of appraised assets, exceeding the maximum policy range allocation will trigger a conscious review by the chief investment officer, the specialty and general consultants, and the Investment Committee rather than an automatic rebalancing.

INVESTMENT STRUCTURE

Investment structure guides and directs present and future investment decisions in a prudent manner. The structure is also used by CalSTRS to mitigate the strategic investment risk within the portfolio. Investment related issues addressed include:

1. The relative amount of active and passive management
2. The relative amount of internal and external management
3. The appropriate direct and indirect costs of each asset category
4. The appropriate reporting standards and time horizons

ASSET ALLOCATION STRUCTURE

1. Based on academic studies, a vast majority of the total return is attributable to the asset allocation decision. Consequently, each asset category shall remain within the tactical range approved in the strategic asset allocation adopted by the Board.
2. Control of the cash flow is critical to the success of long-term investment strategies. Estimated cash flows shall be provided to the Investment Committee in conjunction with the biennial actuarial study.
3. No less than quarterly, the chief investment officer will complete a report identifying the salient aspects of the investments, including a section on compliance with approved asset allocation targets.

CORPORATE GOVERNANCE POLICY

1. CalSTRS has developed robust policies and standards for fair and open governance of corporations. As long-term owners and lenders to corporations around the world, it is CalSTRS' duty to protect those assets through the pursuit of good governance and operational accountability.
2. More detailed information about the program can be found in the CalSTRS Corporate Governance Program Policy.

GLOBAL EQUITY STRUCTURE

1. The equity portfolio is a full global portfolio comprised of U.S.; non-U.S. developed countries, and emerging markets. Each segment is managed under a different structure and the Global Equity Policy has set forth targets and ranges for each area.
2. The U.S. segment of the Global Equity Portfolio will be managed using both passive (70% target) and active (30% target) strategies. The structure of the active portfolio will follow the general percentage breakout of the Russell 3000 Index between large and small capitalization and value and growth characteristics.
3. The non-U.S. segment of the Global Equity Portfolio is assumed to be more inefficient, allowing active management to add value. The target for the non-U.S. developed markets segment of the portfolio will be an equal amount of active management (50%) and passive management (50%) strategies.
4. Emerging markets segment will be utilized to enhance return and diversification and will be 100 percent actively managed in accordance with the Global Equity Policy. This portfolio is benchmarked to an MSCI Emerging Markets Free Custom Index. The target allocation to emerging markets will be based on its weight in the overall benchmark (ACWI ex-U.S. Custom Investable Market Index).
5. More detailed information and standards about the asset class can be found in the CalSTRS Global Equity Investment Policy.

FIXED INCOME STRUCTURE

1. The Fixed Income Portfolio shall be comprised of investment grade and non-investment grade securities, U.S. dollar based and non-U.S. dollar based securities. The portfolio will target 80 percent using an enhanced indexing strategy, while 20 percent will be externally actively managed using a broader universal fixed income and high-yield securities opportunity set. The internally managed portfolio will emphasize tracking the risk characteristics of the performance benchmark.
2. Short term fixed income/liquidity and cash securities, including the cash portion of equity portfolios, shall be managed internally with emphasis on safety and liquidity. The portfolio shall be comprised of investment grade securities; and other appropriate securities as approved in the policies and procedures.
3. More detailed information and standards for the asset class can be found in the CalSTRS Fixed Income Investment Policy.

CURRENCY MANAGEMENT STRUCTURE

1. The Currency Management Program overlays CalSTRS total exposure to foreign currencies from the U.S. equity and the Real Estate portfolios. The program structure is approximately 80 percent internally managed, with a primary focus on defensive hedging in periods of a strong dollar, with opportunity for cross hedging to add value. External active currency overlay managers will be used for approximately 20 percent of the overall currency exposure. These managers may actively shift currency exposure to add value to the portfolio.

2. More detailed information about the program and structure can be found in the CalSTRS Currency Management Program Policy.

PRIVATE EQUITY STRUCTURE

1. The Private Equity Portfolio can include limited partnerships, (and other limited liability vehicles), direct investments in general partnerships, co-investments, and secondary interests in the following market segments: Buyouts, Venture Capital, Debt Related, Core Private Equity, and Private Equity Special Mandates. The primary objective for the Private Equity Portfolio is to provide enhanced investment returns over those available in the public market. 2. Private Equity has substantial fees and costs; consequently, emphasis will be placed on negotiating, monitoring, and controlling the direct and indirect costs of each limited partnership investment.
2. More detailed information and standards for the asset class can be found in the CalSTRS Private Equity Investment Policy.

REAL ESTATE STRUCTURE

1. The Real Estate Portfolio will be comprised of direct real estate investments, joint venture/value added investments, and commingled funds (opportunistic funds) with adopted targets of 60 percent to core, 20 percent value added and 20 percent to higher-risk tactical investments. Leverage maybe applied within the constraints set forth in the CalSTRS Real Estate Investment Policy.
2. To more closely align the interests of the plan sponsor and real estate manager, emphasis will be placed on negotiating, monitoring, and controlling the cash flow (both income and expense) associated with each property.
3. More detailed information and standards for the asset class can be found in the CalSTRS Real Estate Investment Policy.

INFLATION SENSITIVE STRUCTURE

1. This asset class consists of several asset types that, when combined, should produce a relatively stable return stream, with a return level between equities and fixed income, and an overall higher correlation to inflation than equity or fixed income. The initial portfolio was comprised of global inflation linked bonds/securities and infrastructure investments. Additional investment areas and strategies have been added upon the Investment Committee's approval.
2. Infrastructure investments are governed by the CalSTRS Infrastructure Investment Policy, initially adopted in July 2008.
3. More detailed information and standards for the asset class can be found in the CalSTRS Inflation Sensitive Investment Policy.

INNOVATIVE STRATEGIES

1. These strategies will invest in a diversified portfolio of assets that generally fall outside of the traditional asset classes currently used by the Board. The purpose is to provide the

Board with the opportunity to invest in a wide spectrum of investment opportunities that will be required to demonstrate success before committing larger dollar amounts to a specified strategy.

2. Discretionary separate account relationships may be entered into, subject to pre-approved investment guidelines. The Chief Investment Officer must approve any deviations from the approved guidelines. For this reason, investments shall be structured to facilitate alignment of interests between management and CalSTRS, management accountability, investment monitoring, and liquidity.
3. More detailed information and standards for these strategies can be found in the CalSTRS Innovation Portfolio Investment Policy.

RISK MITIGATING STRATEGIES (RMS) STRUCTURE

1. The purpose of RMS is to help diversify CalSTRS portfolio large exposure to global economic growth within the overall investment portfolio. This class will contain assets and investment strategies with structural aspects that provide improved diversification and potential protection in negative equity markets.
2. The investments exhibit a low to negative correlation to the Global Equity asset class. It is expected that during economic recessions and periods of negative global equity market returns, this asset class will provide diversification and produce a positive or less negative relative return. Correspondingly, it is understood that in periods of strong economic growth and / or strong global equity returns, this asset class will exhibit a very low return to slightly negative return.
3. This class will consist of four core strategies; long-term U.S. Government Bonds, Trend Following, Global Marco, and Systematic Risk Premia. Because this class is a collection of diverse investments in total, it will not have a single benchmark, but rather an aggregate benchmark consisting of the individual benchmarks assigned to each core strategy. At the inception of the RMS class, the blended benchmark will be based on a dynamic weighting of each of the strategies. When all of the individual strategies achieve their target weights, the blended benchmark will utilize the target weights of each strategy.
4. More detailed information and standards for these strategies can be found in the CalSTRS RMS Policy.

ADDITIONAL INVESTMENT PROGRAMS & POLICIES

CalSTRS also maintains programs and policy statements for the following additional investment programs:

1. California Investments – Urban & Rural Underserved Markets
2. Securities Lending
3. Credit Enhancement
4. Member Home Loan Program

5. Divestment Policy
6. Pension2[®] Investment Policy
7. Responsible Contractor Policy – Real Estate

Additional information and standards for each can be found in their respective investment policies statements.

VALUATION OF INVESTMENTS

1. CalSTRS Investment portfolio assets are to be priced, invested, administered and managed in a prudent manner for the sole benefit of its participants and beneficiaries, in accordance with the California Constitution, the Teacher’s Retirement Law, and other applicable statutes.
2. CalSTRS seeks to value the assets of the Total Fund consistent with best practices and in alignment to policies set forth by CalSTRS Board of Trustees. The Investment branch shall establish processes by which pricing vendors are selected, prioritized and reviewed for such valuations and ensure these processes are followed through regular oversight.
3. CalSTRS considers a number of significant measures such as data accuracy, reliability, integration, and comprehensive coverage, when determining a pricing source hierarchy. Pricing vendors are selected, prioritized and reviewed for the most appropriate and accurate valuations.
4. CalSTRS performs reviews of the pricing source hierarchy, methodology, and tolerances for the purpose of evaluating reasonability of security valuation and to mitigate risk of mis-priced investments relating to the Fund’s assets. The pricing source hierarchy is implemented by the master custodian and the oversight is under the purview of the Director of Investment Operations.

REPORTING

On at least a semi-annual basis, the investment office and the chief investment officer will prepare a comprehensive set of reports on the Investment program to include the asset allocation, movement of assets, cash flow, and the market value and changes to each asset class. Semi-annually, the general consultant and CIO will preview and present the investment performance of the CalSTRS Investment Portfolio.

Approved July 2002
Revised Capital Market Assumptions December 2002
Revised Asset Allocation Plan November 2003
Revised November 2003
Revised December 2003
Revised December 2005
Revised Capital Market Assumptions February 2006
Revised June and July 2006
Revised for new asset allocation targets September 2006
Revised for new asset allocation targets September 2007

Revised for new Asset Allocation targets and ESG Policy July 2008

Revised to add 21st Risk Factor for Human Health to the ESG Policy, Attachment A September 2008

Expand Asset class ranges November 2008

Revised asset allocation targets March 2009

Revised for New Asset Allocation targets August 2009

Revised for Asset Allocation targets July 2010

Revised for new Asset Allocation targets and to change the name of the Absolute Return Asset class to Inflation Sensitive, July 2011

Revised to create the Overlay Asset Class, April 2012

Revised for new Asset Allocation ranges, Absolute Return Asset Class and Benchmark adjustments September 2013

Revised for Global Equity, Inflation Sensitive, Real Estate and Private Equity Benchmarks and updated language for Global Equity policy November 2014

Revised for the new 2015 Asset Allocation mix and inclusion of the new Risk Mitigating Strategies Asset Class which will replace the Absolute Return Asset Class April 2016

Revised for new Asset Allocation targets, Valuation Statement and to reflect the new Innovative Strategies July 2016

Revised for to update equity benchmark and Asset Allocation ranges effective January 1, 2017 November 2016

Revised for new Asset Allocation targets effective June 30, 2017, June 2017

Revised for housekeeping and to match the Asset Class Policy changes approved in FY 16-17, July 2017

Revised for new interim Asset Allocation targets effective January 1, 2018, November 2017

Attachment A: Investment Policy for Mitigating Environmental, Social, and Governance Risks (ESG)

POLICY

The fiduciary responsibility of the Board, as described in detail within the overall Investment Policy and Management Plan, is to discharge its responsibility in a manner that is in the sole and exclusive interest of the participants and beneficiaries and will assure the prompt delivery of benefits and related services.

CalSTRS invests a multi-billion dollar fund in a unique and complex social-economic milieu and recognizes it can neither operate nor invest in a vacuum. As a significant investor with a very long-term investment horizon, the success of CalSTRS is linked to global economic growth and prosperity. The System's investments impact other facets of the global economy and actions and activities that detract from the likelihood and potential of global growth are not in the long-term interests of the Fund.

Consistent with its fiduciary responsibilities to CalSTRS members, the Board has an obligation to ensure that the corporations and entities in which CalSTRS invests strive for long-term sustainability in their operations. Managers of our investments who do not strive for sustainability jeopardize achieving the long-term expected rate of return we expect. Therefore, CalSTRS incorporates ESG considerations into its analysis of the riskiness of its investment decisions and its ownership policies and practices, to the extent that ESG factors are material to the long-term success of an investment.

Since CalSTRS is a long-term investor and may hold an investment in a corporation or entity for many decades, short-term gains at the expense of long-term gains are not in the best interest of the Fund. Sustainable returns over long periods are in the economic interest of the Fund. Conversely, unsustainable practices that hurt long-term profits are risks to the System.

Since CalSTRS must invest huge sums of moneys for long periods of time to pay for future benefits promised to California Teachers, our decision to invest in corporations and other entities predominately reflects a judgment that the ownership will produce a sustainable rate of return which will make it an attractive investment and help CalSTRS meet its long-term obligations. It is important to note that CalSTRS ownership of a security in a company does not signify that CalSTRS approves of all of the company's practices or its products or that CalSTRS believes a particular company is an attractive investment since the security may be owned due to its membership in a particular index. CalSTRS utilizes "index" investing due to its low cost and efficient structure. These "index" investments are broadly diversified and composed of

thousands of individual companies.

Since 1978, CalSTRS has used a written policy, the Statement of Investment Responsibility, SIR, to navigate the complex landscape of ESG issues. The long history of this document is testimony to the national leadership of CalSTRS among pension funds in addressing ESG matters through a written policy. The SIR will continue to guide CalSTRS proxy voting; however this ESG Policy is CalSTRS's preeminent policy on ESG matters and will guide active investment decisions and passive index strategy engagements.

PROCEDURES

To help manage the risk of investing a global portfolio in a complex governance environment, CalSTRS has developed a series of procedures to follow when faced with any major environmental, social or governance issue as identified by the ESG risk factors.

When faced with a decision or other activity that potentially violates CalSTRS ESG Policy; the Investment Staff, CIO and Investment Committee will undertake the following actions:

- A. The CIO will assess the potential ESG policy violation both as an ESG risk and as an impact to the System. The extent of the responsibility of the System to devote resources to address these issues will be determined by: 1) the size of the investment, and 2) the gravity of the violation of CalSTRS ESG Policies.
- B. At the CIO's direction, the Investment Staff will directly engage corporate management or other appropriate parties to seek information and understanding concerning the ESG policy violation and its ramifications on the System.
- C. The CIO and investment staff will provide a report to the Investment Committee of the findings associated with an ESG policy violation engagement and recommend any further action of engagement or need to commit further System resources. The Investment Committee can marshal further resources given the gravity of the situation.

To assist CalSTRS Staff and external investment managers in their investment analysis and decision-making, CalSTRS has developed a list of ESG risk factors that should be considered as part of the financial analysis of any active investment decision. For passive index strategies, CalSTRS uses the ESG risk factors to guide engagement activities. This ESG list is not exhaustive and does not attempt to identify all forms of risk that are appropriate to consider in a given investment transaction or engagement; however, they do provide a framework of other factors that might be overlooked. These risk factors should be reviewed for any CalSTRS investment or engagement in any asset class .

CalSTRS expects all investment managers, both internal and external to assess the risk of each of the following factors when making an active investment. The manager needs to balance the rate of return with all the risks including consideration of the specific investments exposure to each factor in each country in which that investment or company operates.

CALSTRS ESG RISK FACTORS

Monetary Transparency

The investment's long-term profitability by whether or not a country or company has free and open monetary and financial data, and its observance of applicable laws.

Data Dissemination

The investment's long-term profitability by whether or not a country is a member of the IMF (or similar organization) and satisfies the conditions for access, integrity, and quality for most data categories.

Accounting

The investment's long-term profitability by whether or not the accounting standards are formulated in accordance with International Accounting Standards or the U.S. Generally Accepted Accounting Principles.

Payment System: Central Bank

The investment's long-term profitability by whether the activities of a country's central bank encompass implementing and ensuring compliance with principles and standards which are established to promote safe, sound, and efficient payment and settlement

Securities Regulation

The investment's long-term profitability by exposure to operations in countries that have not complied with IOSCO objectives, which provide investor protection against manipulation and fraudulent practices.

Auditing

The investment's long-term profitability by whether or not the country uses International Standards on Auditing in setting national standards.

Fiscal Transparency

The investment's long-term profitability by its exposure or business operations in countries that do not have not some level of fiscal transparency such as publication of financial statistics, sound standards for budgeting, accounting, and reporting.

Corporate Governance

The investment's long-term profitability by whether or not the government recognizes and supports good corporate governance practices and whether it generally adheres to OECD principles.

Banking Supervision

The investment's long-term profitability from its exposure to countries that have not endorsed/complied with the Basel Core Principles. An endorsement includes an agreement to review supervisory arrangements against the principles and bring legislation in line with the principles where necessary.

Payment System: Principles

The investment's long-term profitability by whether a country complies with the 10 Core Principles for Systemically Important Payment Systems, which includes operational reliability, efficiency, real time settlement, final settlement in central bank money; and whether rules and procedures are clear and permit participants to understand the financial risks resulting from participation in the system.

Insolvency Framework

The investment's long-term profitability from its business operations and activities in specific countries with regard to bankruptcy reform or insolvency legislation.

Money Laundering

The investment's long-term profitability from exposure and whether or not a country has implemented an anti-money laundering regime in line with international standards; consideration should be given to compliance with the 40 recommendations in the Financial Action Task Force, FATF, on Money Laundering; and whether it is a member of FATF.

Insurance Supervision

The investment's long-term profitability from whether or not a country has a regulatory framework in line with International Association of Insurance Supervisors, IAIS, Principles.

Respect for Human Rights

The investment's long-term profitability from its business operations and activities in countries that lack or have a weak judicial System. Assess the risk to an investment's long-term profitability from its business operations and activities in a country that engages in or facilitates the following: arbitrary or unlawful deprivation of life, disappearance, torture and other cruel, inhuman, or degrading treatment or punishment, arbitrary arrest, detention, or exile, arbitrary interference with privacy, family, home, or correspondence, use of excessive force and violations of humanitarian law in internal conflicts. Consideration should be given to governmental attitude regarding international and non-governmental investigation of alleged violations of human rights.

Respect for Civil Liberties

The investment's long-term profitability from operations, activities, and business practices in countries or regions that do not allow freedom of speech and press, freedom of peaceful assembly and association, freedom of religion, freedom of movement within the country, allowance for foreign travel, emigration, and repatriation.

Respect for Cultural and Ethnic Identities

The investment's long-term profitability from operations, activities and business practices that do not adequately respect cultural values and ethnic identities.

<p>Respect for Property Rights</p> <p>The investment’s long-term profitability from operations, activities and business practices that dispossesses or degrades peoples’ lands, territories or resources, or does not adequately respect established property rights.</p>
<p>Respect for Political Rights</p> <p>The investment’s long-term profitability from business practices and activities in countries that do not allow their citizens the right to advocate for change to their government.</p>
<p>Discrimination Based on Race, Sex, Disability, Language, or Social Status</p> <p>The investment’s long-term profitability from business practices and activities on discrimination, such as discrimination against women, children, and persons with disabilities, national/racial/ethnic minorities, or indigenous people.</p>
<p>Worker Rights</p> <p>The investment’s long-term profitability from management and practices globally in the area of worker’s rights; specifically the right of association, the right to organize and bargain collectively, prohibition of forced or bonded labor, status of child labor practices and minimum age for employment, acceptable work conditions, or human trafficking.</p>
<p>Environmental</p> <p>The investment’s long-term profitability from activities and exposure to environmental matters such as; depleting or reducing air quality, water quality, land protection and usage, without regard for remediation.</p>
<p>Climate Change</p> <p>The investment’s long-term profitability from inadequate attention to the impacts of climate change, including attention to relevant climate policy considerations and emerging climate risk mitigating technologies.</p>
<p>Resource Efficiency</p> <p>The investment’s long-term profitability from inadequately managing resource usage in a resource-constrained environment amid growing resource demand.</p>
<p>War/Conflicts/Acts of Terrorism</p> <p>The investment’s long-term profitability from business exposure to a country or region that has an internal or external conflict, war, acts of terrorism or involvement in acts of terrorism, and whether the country is a party to international conventions and protocols.</p>
<p>Human Health</p> <p>The investment’s long-term profitability from business exposure to an industry or company that makes a product which is highly detrimental to human health so that it draws significant product liability lawsuits, government regulation, United Nations sanctions and focus, and avoidance by other institutional investors.</p>

CALIFORNIA STATE TEACHERS' RETIREMENT SYSTEM
INVESTMENT RESOLUTION

WHEREAS, the Electorate of the State of California in November, 1992 amended Section 17 of Article XVI of the State Constitution by approval of Proposition 162; and

WHEREAS, the Teachers' Retirement Board embraces the concepts of the revised Section 17 of Article XVI of the State Constitution, which states that the Retirement System shall have sole and exclusive fiduciary responsibility over the assets of the public pension or retirement system; and

WHEREAS, the Teachers' Retirement Board has approved the Investment Plan which provides for wider diversification of the System's investment assets; and

WHEREAS, the Teachers' Retirement Board on the advice of its consulting actuary and the pension fund consultant has adopted the objective of achieving a long term annualized investment return of 3.50% in excess of the rate of inflation; and

WHEREAS, in the exercise of its fiduciary responsibilities the Board has considered and approved various classes of investments for the Teachers' Retirement Fund; therefore it is

RESOLVED, that the following investment classes are authorized if deemed prudent at the time of purchase:

Fixed-Income Securities

Fixed Income investments as authorized by the Investment Management Plan and Fixed Income Policies and Guidelines and as authorized by the Investment Committee.

Equity Securities

Equity investments as authorized by the Investment Management Plan and Global Equity Policies and Guidelines and as authorized by the Investment Committee.

Real Estate

Real Property investments as authorized by the Investment Management Plan and Real Estate Policies and Procedures and as authorized by the Investment Committee.

Private Equity

Limited partnership investments in equity of fixed income securities as defined in the Private Equity Policies and Procedures and as authorized by the Investment Committee.

Inflation Sensitive

Inflation linked fixed income securities and Infrastructure investments as defined by the Infrastructure Policy and Procedures, and as authorized by the Investment Committee.

Risk Mitigating Strategies

Investments as authorized by the Investment Policy and Management Plan and the Risk Mitigating Strategies Policies, Procedures, and Guidelines.

Other Investments

Purchase of other types of investments may be made only with advance approval of the Investment Committee of the Teachers' Retirement Board.

Advance approval of the Investment Committee or its designates may be obtained by authorization for individual securities, or for a particular class of investments, or for specified investment managers of the Teachers' Retirement Fund.

RESOLVED further that all investments shall be made with the standards of care, skill, prudence and diligence prescribed in the revised Section 17 of Article XVI of the State Constitution. These tests will involve, importantly, full consideration of proper diversification of investments, adequacy of reliable information for analysis of investments, and suitability for the requirements of the Teachers' Retirement Fund. The Board endorses the principle that prudence of individual investments shall be judged in the context of the total Retirement Fund portfolio;

RESOLVED further, that cash reserves of the System are to be managed for the safety and convenience of the Teachers' Retirement Fund, in investments which are considered to be prudent money market instruments by internal investment managers;

RESOLVED further, that the services of at least one external independent organization (performance evaluator) will be retained to assess the investment results of portfolio managers and to compare such results with those of similarly situated institutions and such other standards of measurement as the Investment Committee deems appropriate;

RESOLVED further, that investments now held which no longer qualify for purchase under this Resolution may be retained if qualified under the Resolutions existing at their respective dates of acquisition;

RESOLVED further, that this Investment Resolution rescinds and replaces all previously adopted Investment Resolutions.

*Adopted by the Teachers' Retirement Board on October 19, 1984
Revised to include foreign issuers within the S&P 500 Stock Index on April 19, 1985
Revised to reflect legislation prohibiting investment within South Africa on December 19, 1986
Revised to reflect passage of Proposition 162 and implementation of Global Tactical Asset*

Allocation Program on September 9, 1993
Revised to remove reference to South Africa investment restriction on May 11, 1994
Revised to broaden Fixed Income and Equity reference on July 10, 2008
Revised to include the Fixed Asset class, August 13, 2009
Revised to change the name of the “Fixed Asset” class to Inflation Sensitive, July 7, 2011
Revised to incorporate the Risk Mitigating Asset Class, April 2016

B. Global Equity Portfolio Policy

EXECUTIVE SUMMARY

In accordance with the CalSTRS Investment Policy and Management Plan, IPMP, the California State Teachers' Retirement System Board has established an allocation for global equity securities. CalSTRS' global equity assets are to be invested, administered, and managed in a prudent manner for the sole benefit of its participants and beneficiaries, in accordance with the California Constitution, the Teachers' Retirement Law, and other applicable statutes. No investment instrument or activity prohibited by the IPMP shall be authorized for the Global Equity portfolio.

This document is intended to summarize the fundamental objectives and considerations used in the investment, administration, and management of the Global Equity portfolio. These policies are designed to set boundaries that will ensure prudence and care in the management of the global equity assets while allowing sufficient flexibility in the management process to capture investment opportunities. CalSTRS believes that environmental, social, and governance, ESG, issues can affect the performance of our investments. As a result, the CalSTRS 21 Risk Factors have been developed as a tool that both internal and external investment managers are expected to use to assess the impact of ESG risk when making an investment on behalf of CalSTRS. Detailed procedures and guidelines for each of the portfolios are maintained separately.

As with all other plan assets, these policies cannot be altered without explicit direction from the Board. A flowchart (Exhibit 1) is included to provide the context for the policies within the general process of implementing the Global Equity portfolio. Words and terms that may be unfamiliar to the reader are referenced in the glossary.

GLOBAL EQUITY INVESTMENT POLICIES

1. Investment Objective:

The global equity assets shall be invested to improve the diversification of the total investment portfolio and to enhance its risk-adjusted total return. The assets shall be managed to provide long-term capital appreciation as well as generate current income. Consistent with a prudent level of risk, global equity assets shall be managed to achieve optimum performance through diversification across equity market regions, styles, and capitalization.

2. Performance Objective:

The CalSTRS Global Equity Portfolio includes U.S. and Non-U.S. equity strategies which, in aggregate, are to be structured to achieve a long-term total return in excess of the Global Equity policy benchmark.

3. Policy Benchmark:

Until June 30, 2016, the Global Equity policy benchmark is 67% Russell 3000 Custom Index and 33% MSCI All Country World Index ex-U.S. IMI Custom Index (MSCI ACWI ex-U.S. Custom IMI). The long-term policy benchmark allocations of the U.S. and Non-U.S. portfolios are equal to the U.S. and Non-U.S. equity weights of the MSCI All Country World Investable Market Index (MSCI ACWI IMI). During the transition period starting July 1, 2016, the policy benchmark allocations of the U.S. and Non-U.S. portfolios shall be equal to the actual weights of the U.S. and non-U.S. equity portfolios.

4. Portfolio Structure:

Asset Allocation: Under the direction of the chief investment officer, staff has discretion, within the range, to implement tactical allocations in the Global Equity portfolio.

Until June 30, 2016, the target allocations and ranges for the U.S. and Non-U.S. equity portfolios are as follows:

Portfolio Segment	Target Allocation	Range
U.S. Equity Portfolio	67%	57%-77%
Non-U.S. Equity Portfolio	33%	23%-43%

During the transition period starting July 1, 2016, the allocation range of the U.S. and Non-U.S. equity portfolios shall remain between the target allocations above and the U.S. and Non-U.S. equity weights of the MSCI ACWI IMI. The long-term target allocations of the U.S. and Non-U.S. equity portfolios shall be equal to the U.S. and Non-U.S. equity weights of the MSCI ACWI IMI, with a range of plus (+) or minus (-) 10 percent.

Active/Passive Allocation: The U.S. public equity assets shall be invested using both active and passive management strategies. The target for passive management is 70 percent, with a range of plus (+) or minus (-) 10 percent. The target for active management is 30 percent, with a range of plus (+) or minus (-) 10 percent.

U.S. Portfolio Segment	Target Allocation	Range
U.S. Active Portfolio	30%	20%-40%
U.S. Passive Portfolio	70%	60%-80%

The Non-U.S. public equity assets shall be invested using both active and passive management strategies. The emerging markets segment of the portfolio will include active management strategies and may also include ETFs and derivative products. In determining the passive/active ratio for the Non-U.S. equity portfolio, the emerging markets allocation will be excluded. Therefore, the remaining (Non-U.S. equity less emerging markets) portfolio's target for passive management is 50 percent, with a range of plus (+) or minus

(-) 10 percent. The target for active management is 50 percent with a range of plus (+) or minus (-) 10 percent.

Non-U.S. Portfolio Segment	Target Allocation	Range
Non-U.S. Developed Markets Active Portfolio	50%	40% -60%
Non-U.S. Developed Markets Passive Portfolio	50%	40% -60%
Emerging Markets Active Portfolio	100%	100%

5. Eligible Securities:

The following securities are authorized:

- i. All equity securities including listed Exchange Traded Funds, ETFs, and securities that exhibit characteristics of equity securities traded on the local market(s).
- ii. Domestic equity securities consisting of all stocks domiciled in the U.S. plus eligible securities including ADRs of international securities traded on the U.S. and Canadian exchanges.
- iii. International securities including GDRs of international securities traded on the exchanges of all countries contained in the MSCI All Country World Index ex U.S. and the MSCI Frontier Markets Index.
- iv. Units of participation in commingled index funds or trusts.
- v. Derivatives. The objectives for using derivatives, including the use of equitization of cash held by passive and active portfolios through the use of derivatives, are to assist in the efficient management of risk, asset allocation and market exposures in the Global Equity portfolio through the use of any derivative tools such as, but not limited to, futures, options, swap agreements, structured notes, warrants, asset trusts, or forward agreements. The implementation of the derivatives strategies shall be thoroughly vetted by staff to conform to the risk management guidelines of the Global Equity portfolio, along with the ranges specified within CalSTRS Global Equity Portfolio Procedures Manual (Procedures). In addition, these strategies may not increase or decrease the global equity exposure to the total fund outside the ranges identified within the IPMP. Further limitations with respect to aggregate risk control and counterparty exposure shall be documented within the Procedures.
- vi. Investment restrictions included in the IPMP are hereby incorporated by reference.

6. Global Equity Internal/External Management

- i. The Global Equity portfolio is managed by both internal staff and external investment managers. Within the boundaries established in the Procedures, approved by the CIO or designee, the decision to hire an external manager or utilize internal investment staff for an investment strategy is made by applying the board-approved decision criteria matrix (Exhibit 2) to evaluate a variety of decision factors including, but not limited to, cost effectiveness/control, market transparency and liquidity, market efficiency, active risk, and infrastructure/resource requirements.
- ii. Internal staff shall only implement index-based investment strategies with a maximum forecast tracking error of 50 basis points.
- iii. Within the boundaries and ranges established by this policy, staff is responsible for the selection, allocation, and oversight of internally and externally managed portfolios. Comprehensive procedures, manager guidelines, objectives, benchmark selection, forecast tracking error, portfolio composition, constraints, and trading activities are to be monitored across all Global Equity portfolios. CalSTRS shall also maintain a pool of external managers to supplement the existing external managers or replace a terminated manager, as needed.
- iv. Investment managers are required by contract terms and investment guidelines to seek best net execution and act as a fiduciary under California law over plan assets.
- v. Global Equity staff will assess the need for each Global Equity manager to utilize soft dollars for research and then amend each manager's Investment Guidelines as necessary.

7. Risk Management

- i. **Forecast Tracking Error:** Portfolios shall be managed within predefined risk or tracking error guidelines. Forecast tracking error is used as a way to control overall portfolio risk. This quantifiable risk is budgeted among the various sub-asset classes of the Global Equity portfolio. These risks are monitored on a daily basis by each portfolio manager and reported weekly to the director of global equity.
- ii. **Diversification:** Diversification within investment portfolios is critical in order to control risk and maximize returns. For the U.S. portfolio, minimum and maximum ranges with respect to investment management style and capitalization size shall be established within the context of the characteristics of the performance benchmark as identified in the Procedures. For the Non-U.S. portfolio, minimum and maximum ranges with respect to geographic region shall

be established within the context of the characteristics of the performance benchmark. Such ranges, for both the U.S. and Non-U.S. portfolios, shall be documented within the Procedures and are subject to change as conditions warrant, as determined by the director of global equity.

- iii. **Trading Parameters:** The following parameters apply with respect to non-cumulative daily trade limits within the internally-managed Global Equity portfolios.

Investment Officer I	Up to 1% per internally managed portfolio
Investment Officer II	Up to 2% per internally managed portfolio
Investment Officer III	Up to 2.5% per internally managed portfolio
Associate Portfolio Manager	Up to 3% per internally managed portfolio
Portfolio Manager	Up to 4% per internally managed portfolio
Director of Global Equity	Up to 5% of Total Global Equity portfolio
Deputy Chief Investment Officer	Up to 10% of Total Global Equity portfolio
Chief Investment Officer	Up to 10% of Total Global Equity portfolio

For derivatives and transition management portfolios, the above risk-based trading parameters are non-cumulative and are applied to the market value of the U.S. or Non-U.S. segments of the Global Equity portfolio.

- iv. **Authorized Traders:** Authorization letters which indicate who may transact business for the portfolio, including a copy of the most recent IPMP, shall initially be sent to the broker at the time the account is established. Whenever there is a change in authorized personnel, CalSTRS will notify all brokers in writing within 24 hours in the event of termination, and as soon as possible in the event of a newly authorized trader(s).

8. **Monitoring and Reporting**

The following reports will be prepared and presented to the Board, unless otherwise stated, in order to facilitate visibility of compliance monitoring and reporting according to this document:

- i. **Global Equity Semi-Annual Report** – prepared by staff
- ii. **Performance Report** – prepared by master custodian/consultant (semi-annually)
- iii. **Investment Manager Ratings Report** – prepared by staff (semi-annually)
- iv. **Business Plan** – prepared by staff (annually)

9. **Other Strategies**

Periodically the Board will approve investment strategies that may or may not be managed within the global equity asset class specifically, but are instead designed to take advantage of an opportunity and/or to meet a performance objective. Unless a strategy is addressed by a specific policy of its own, Global Equity staff is responsible for the implementation of any strategy that may be directed by the chief investment officer, within the boundaries and ranges established by this policy. Investment guidelines, benchmark selection, tracking error, portfolio composition, constraints, and trading activities are to be administered by staff and integrated into the CalSTRS strategic asset allocation process and risk budget

10. Delegation of Authority

The chief investment officer or designee has the authority to manage the Global Equity asset category and may use other investment personnel to implement these policies and the processes described in the Procedures.

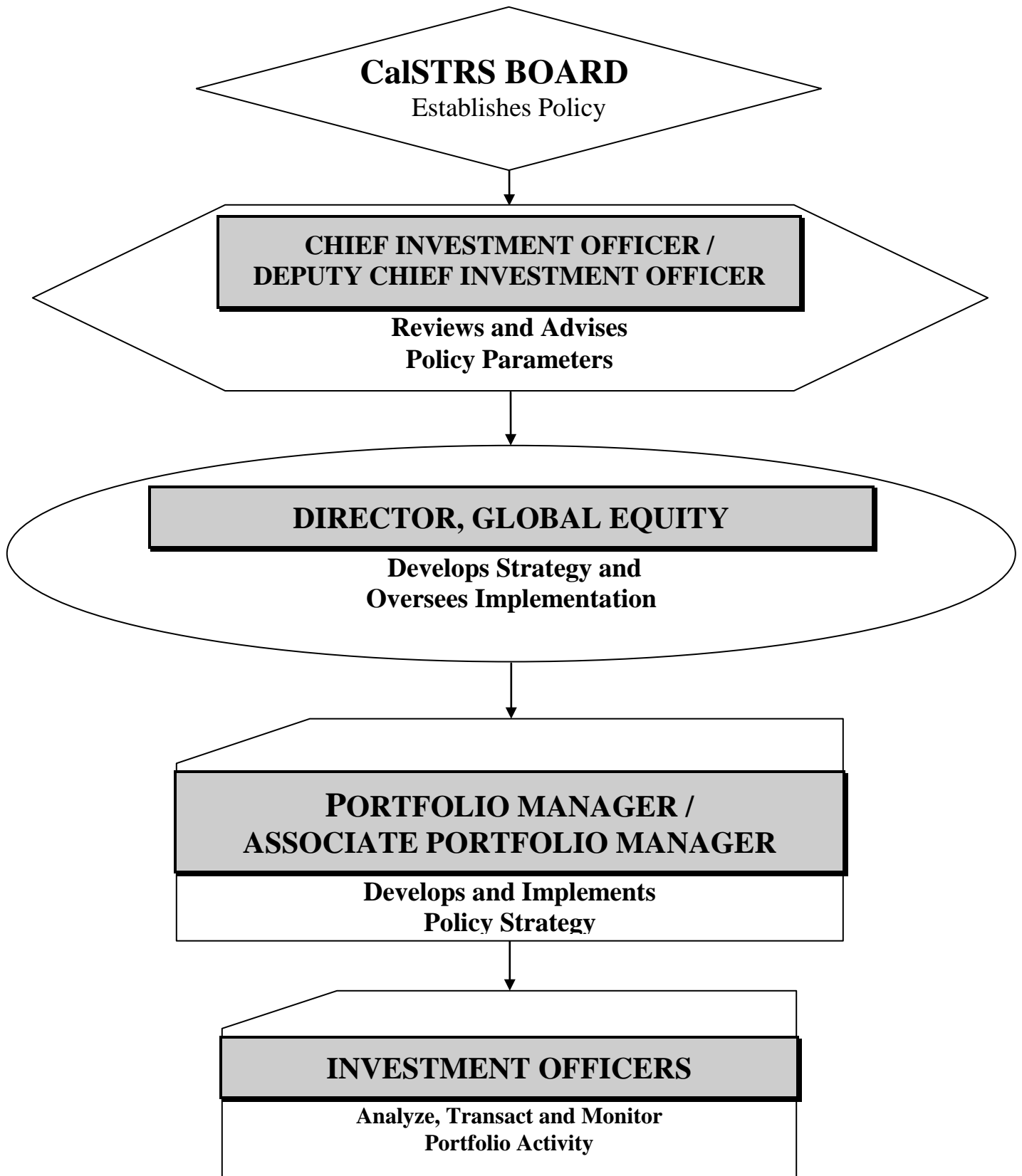
12. Transition Management

The Global Equity unit may use internal or external transition managers to prudently administer and liquidate, if advisable, the existing portfolios of managers that have been relieved of investment management responsibility for CalSTRS.

13. Board Review

The Board or the Investment Committee may review this policy periodically, as deemed appropriate and in keeping with its fiduciary standards.

Adopted by the Teachers' Retirement Board on June 2, 1999
Revised to approve co-investment program for the CG/Relational Program on July 7, 2004
Revised to approve the structure of the emerging markets portfolio on April 7, 2005
Revised to clarify passive/active allocations on June 7, 2006
Revised address to disposition of securities in CG/Relational Program on July 13, 2007
Revised to include Non-U.S. co-investments in CG/Activist Program and increase discretion on July 10, 2008
Revised to define allowable securities and combine internal and external policies on February 4, 2009
Revised to delegate staff authority regarding U.S./Non-U.S. allocation ranges February 4, 2009
Revised to incorporate cash equitization policy April 1, 2009
Revised to clarify delegation of Corporate Governance trade ticket daily limits August 2009
Revised to update Trading Parameters on April 8, 2010
Revised to update int./ext. mgmt. process, update Trading Parameters, and define Corp Gove Activist
Mgrs. on Apr 13, 2012
Revised to confirm Special Situation Investment Authority for Corporate Governance on July 12, 2012
Revised to support additional internal asset management on April 4, 2014
Revised to support the transition to global index weights and to define APM trading limits June 8, 2016
Revised language on soft dollars, updated flowchart (Exhibit 1) to reflect APM in the hierarchy and
reflect new reporting frequency on April 5, 2017
Revised to move Corporate Governance Investment Program from Global Equity Policy to the Corporate
Governance Policy November 1, 2017



Internal / External Decision Criteria Matrix

		Low	Medium	High
<u>Decision Factors</u>	Cost-Effectiveness/ Control	External	External/Internal	Internal
	Market Liquidity & Transparency	External	External/Internal	Internal
	Market Efficiency	External	External/Internal	Internal
	Active Risk	Internal	External/Internal	External
	Infrastructure/ Resource Requirements	Internal	External/Internal	External

Cost-Effectiveness/Control

After including all costs, is internal management able to add more value than external management? All things being equal, management fees increase in direct relation to the risk and complexity of the strategy being managed. Given the narrower band for tracking error (i.e., risk) described earlier in this paper, passive management usually provides opportunities for more cost-effective management of assets, while active management presents the potential to generate alpha. For active management to make sense in the Portfolio, the strategy must generate returns in excess of the benchmark net of management fees which, as discussed in last year’s active/passive study, is difficult to accomplish consistently.

The decision to manage a portfolio internally or externally should not be based solely on who provides the cheapest management fees. Even though many studies have shown that internal asset management typically has a lower cost structure than external management, a more holistic view should be used in the decision making process, which includes control of the assets and market awareness of internal staff. Internal management, it has been argued, allows better coordination over when and how assets are deployed, permits greater control over corporate governance issues, and allows for a more straightforward mechanism to customize investment mandates that align with a plan sponsor’s unique directives. In other words, internal management is able to focus on CalSTRS as its one and only client, versus the multiple accounts among which an external manager must divide its attention. Also, as internal staff begins to manage new

strategies, staff should continue to identify additional ways to take advantage of market inefficiencies when they occur. It should be noted, however, that building in-house investment management expertise can be difficult, given the employment and hiring practices dictated by State employment.

While there seem to be many benefits to internal management, we should recognize that bringing assets in-house requires significant up-front costs which can then be amortized over the investment period. These costs include sufficient staffing levels, computer support systems, specialized software/technology, and access to investment-related data. It is clear that building and sizing the infrastructure, risk management and trading systems, and people are critical to investment success. The same criteria we apply to external managers in terms of people, process, and philosophy apply internally, as well. However, once an infrastructure has been established for an asset class, the incremental costs of adding new strategies may be minimal, depending upon the strategy.

Market Transparency and Liquidity

Does the market have enough liquidity and transparency to allow for effective management of the strategy? While it appears that the internal versus external management debate centers around the public (i.e., fixed income and equity) markets, as opposed to the private markets (i.e., private equity and real estate), it is really the transparency and liquidity of the markets within which each strategy trades that is the primary decision factor.

Private markets are generally less transparent and liquid than other asset classes within the Fund. Public equity and debt markets are more transparent, have broadly and widely recognized indices, are highly liquid, and are amenable to structuring a broadly diversified portfolio. This liquidity and transparency, in terms of widely followed market information and pricing, make equity and fixed income portfolio management a different kind of management challenge, as the assets are broadly available for purchase and sale to all with a mandate and the proper business infrastructure/resources.

Market Efficiency

Does the strategy operate in a market that is efficient or inefficient? Market efficiency refers to the degree that all investors in a market have access to the same information and, at any given time, security prices reflect all available market information. The decision to manage an active or passive strategy should be directly based on the efficiency of the market. For markets that are considered highly efficient, the probability of consistently outperforming the market is relatively low, which suggests that a passive/core strategy would be appropriate. In markets that are less efficient, the opportunity exists to generate alpha. Finding these market inefficiencies requires dedicated resources to identify securities that are considered mispriced. When these inefficiencies are evident, a skilled active manager can take advantage of these opportunities and construct a portfolio that should generate fee-adjusted returns in excess of the market.

Active Risk

Does internal staff have the knowledge and competence to manage the strategy in house? An active strategy requires highly specialized and skilled individuals who are well versed in the pursued strategy and willing to make educated decisions to take prudent risk, in order to achieve

a net return higher than the benchmark. A passive or less active strategy still requires skilled individuals; however, the goal of this type of strategy is to track or slightly exceed the strategy's benchmark, and the research effort is much less intensive than active managers.

Private equity and real estate are uniquely active markets in which expertise, in terms of property or company type, leverage, deal structure, deal components, and terms, make them truly active investments requiring resources capable of reviewing the fundamentals of the deal structure and capital to fund the deal. With internal management, recruiting investment professionals who have highly specialized skills in active strategies may be difficult. CalSTRS' compensation structure and the current environment of state budget cuts may provide a headwind to attracting new investment talent. There is also the potential for key investment staff turnover. This will always be a concern in both internal and external portfolios. CalSTRS, like external managers, would seek to construct a bench of talent for any strategy undertaken.

Infrastructure/Resource Requirements

Does CalSTRS have sufficient infrastructure and the resources to support the strategy? Technology and risk management systems, along with proper staffing levels (front and middle office) are a key ingredient to operating a successful investment management operation. CalSTRS has gained much of this experience over the last 20 years through the development of our own internal infrastructure, in terms of communications, specialized investment software, and analytical criteria needed to operate in the public fixed income and equity markets, as well as our exposure to external managers.

GLOSSARY

ACTIVE MANAGEMENT – An active manager seeks to outperform the benchmark by buying equities that they believe will provide superior performance versus a benchmark, making concentrated decisions to over or underweight a specific stock or sector of the market based on fundamental, technical, or other criteria.

AMERICAN DEPOSITARY RECEIPTS – (ADR). ADRs represent the ownership in the shares of a foreign company trading on U.S. financial markets. ADRs are typically traded on a U.S. national stock exchange.

BASIS POINT – One hundredth of one percent or .0001 in decimal form.

BENCHMARK – A standard against which the performance of a security, mutual fund or investment manager can be measured. Generally, broad market and market-segment stock and bond indexes are used for this purpose.

BEST NET EXECUTION – Refers to executing client transactions so that the client's total cost is the most favorable under the particular circumstances at that time. According to the U.S. Securities and Exchange Commission, some of the factors a broker must consider when seeking best execution of a client's order include: the opportunity to get a better price than what is currently quoted, the speed of execution, and the likelihood that the trade will be executed.

BROKER – Refers to a person or entity registered with the National Association of Security Dealers and provides investment services (research, etc.) and/or execution services.

DERIVATIVE – A derivative is a security whose price/return is dependent upon the price/return of some other underlying asset. Futures contracts, forward contracts, options and swaps are the most common types of derivatives.

DIVERSIFICATION – Investing in a wide range of securities/or asset classes in order to reduce financial risk.

EXCHANGE TRADED FUNDS (ETFs) – ETFs are an investment vehicle traded on stock exchanges which hold assets such as stocks or bonds and trades at approximately the same price as the net asset value of its underlying assets. Most ETFs track an index, such as the Dow Jones Industrial Average or the S&P 500.

FORECAST TRACKING ERROR – The expected standard deviation of the difference between the portfolio return and the benchmark return.

GLOBAL DEPOSITARY RECEIPTS (GDR) – GDRs are certificates issued by a depository bank, which represent ownership of an underlying number of foreign shares. GDRs are commonly listed on international stock exchanges such as the London Stock Exchange

GROWTH STYLE – This style of investment constructs portfolios that have more earnings potential than the benchmark and therefore have the potential to produce superior returns over the benchmark. These portfolios generally exhibit more risk than the benchmark.

INDEXED PORTFOLIO – This type of portfolio is structured to replicate a specific index. The objective is to generate a portfolio that will produce the same return as the index at the same level of risk as the index.

INVESTMENT GUIDELINES – This is a document that establishes the parameters through which the investment manager will invest CalSTRS' assets. These guidelines specify valid securities for the portfolio, the return expected from the manager, how the manager will be evaluated and the period over which the manager will be evaluated.

INVESTMENT POLICY AND MANAGEMENT PLAN – This document outlines CalSTRS general and financial objectives including specific investment strategy. This document is the result of studies that include the assets and liabilities for CalSTRS.

LARGE CAPITALIZATION STYLE – Refers to the investment process that includes a range of styles, from value to growth, that provide active management using large capitalization stocks.

LIQUIDITY – Refers to availability of a stock to be traded. An issue that is readily available is considered to be liquid, an issue that does not trade very often is deemed illiquid.

PASSIVE MANAGEMENT – Passive managers utilize either a replication or optimization method to track a benchmark's performance. With replication, every security in the portfolio is held in the exact proportion as the benchmark. Optimization seeks to mimic the risk and return characteristics of a benchmark by only holding a subset of the benchmark's securities.

PERFORMANCE OBJECTIVE – Refers to each individual external manager's designated benchmark (example, Russell 1000) and their performance target (example, Russell 1000 + 1½ percent).

POOL MANAGERS – Refers to investment managers who have been selected to take the place of funded managers that may be terminated. The pool managers will correct any imbalance caused by the termination of a manager and quickly correct possible unintended bets or tilts.

SMALL CAPITALIZATION STYLE – Refers to an investment process that includes a range of styles, from value to growth, that provide active management using small capitalization stocks.

SOFT DOLLARS – Refers to directed brokerage credits created and used by an investment manager rather than a plan sponsor. The use of soft dollars by investment managers is only allowable under SEC Section 28(e) safe harbor requirements. The term and use of soft dollars has created controversy and criminal actions within the investment management industry as some managers used the client's credits for services beyond the SEC safe harbor limits.

STRUCTURED NOTE – A security with one or more special features, such as making payments based on an underlying index.

SWAP AGREEMENT (SWAP) – An arrangement between two parties to exchange one security for another, to change the mix of a portfolio or the maturities of the bonds it includes, or to alter another aspect of a portfolio or financial arrangement.

VALUE STYLE – Refers to the investment process which seeks to identify present value rather than future rewards, select stocks that will maintain their price in falling markets or periods of economic uncertainty, and look for stocks that are undervalued but fundamentally strong.

WARRANT – A security that gives the holder the right to purchase securities (usually equity) from the issuer at a specific price within a certain time frame.

C. Corporate Governance Program and Portfolio Policy

Corporate Governance Program Policy

EXECUTIVE SUMMARY

The California State Teachers' Retirement System (CalSTRS) is committed to holding and managing equity investments and to exercising the shareholder rights appurtenant to those investments, all for the benefit of its participants and beneficiaries. It is the fiduciary responsibility of the Teachers' Retirement Board (TRB) to discharge its duty in the exclusive interest of the participants and beneficiaries and for the primary purpose of providing benefits to participants and their beneficiaries. The TRB should defray the reasonable expenses of administering the Fund; the investment policy of the Fund should reflect and reinforce this purpose. The TRB views its corporate governance role as that of a catalyst for enhanced management accountability, disclosure and performance. The objective of the TRB's corporate governance effort is to enhance long-term shareholder returns.

CalSTRS is a long-term investor; its long-term strategy is demonstrated through its significant commitment to passively managed portfolios in its three largest asset categories: Domestic Equities, Fixed Income, and non-U.S. Equities. CalSTRS' thrust in corporate governance is to maximize the longer-term value of the shares, consistent with its role as a significant capital allocator. CalSTRS recognizes that the lending of securities, especially equity common shares is an important practice in the investment world, improving market liquidity, reducing the risk of failed trades, and adds significant incremental return to investors. As a long-term investor, CalSTRS believes that its beneficiaries' interests are more appropriately served when votes are cast by market participants who have an economic interest in the underlying company. CalSTRS will seek to coordinate the lending process with all the parties, including the investment lending officers and the custodial relationships in its effort to insure that under-voting or voting abuse is not suffered by the fund. It is understood that this effort will result in the recall of loaned shares and the restriction of lending certain shares; all of which will diminish the income received from CalSTRS' securities lending efforts; however as fiduciaries with a long-term investment horizon, CalSTRS is committed to exercising its proxy authority over portfolio investments.

Statutory Authority: Education Code Section 22354 requires the Board to retain investment managers who are experienced and knowledgeable in corporate management issues to monitor corporations whose shares are owned by the System plan and to advise the Board on the voting of the shares owned by the plan and on all other matters pertaining to corporate governance. While CalSTRS is not subject to the Employee Retirement Income Security Act (ERISA), applicable provisions of both the California Constitution and the Education Code make clear that CalSTRS' commitment to corporate governance is a diligent exercise of its fiduciary responsibility. As observed by the U.S. Department of Labor:

“In general, the fiduciary act of managing plan assets which are shares of corporate stock would include the voting of proxies appurtenant to those shares of stock. ... Moreover, because voting such proxies involves plan asset management, section 403(a) requires that plan trustees have the exclusive authority and responsibility for voting these proxies...”

Thus, CalSTRS’ legal authority for corporate governance springs from its fiduciary concerns as a prudent investor and the statutory obligation imposed on it by the Legislature.

The following represent the approved policies to be used in the exercise of CalSTRS’ shareholder rights and the implementation of its Corporate Governance Program. The policies are designed to set boundaries for the management of proxies and other corporate actions. As with all other plan assets, these corporate governance policies cannot be altered without explicit direction from the TRB.

1. **LAWS AND STATUTES:** The Corporate Governance Program (Program) for the California State Teachers’ Retirement System (CalSTRS) will be managed in a prudent manner for the sole benefit of the CalSTRS participants and beneficiaries, in accordance with the Teachers’ Retirement Law and other applicable State statutes.
2. **REGULATIONS:** For domestic equities, the Program will comply with the rules of the Securities and Exchange Commission (SEC), equity exchanges, and other regulatory agencies. For non-U.S. equities, the Program will comply with the appropriate regulatory body in the respective country.
3. **PROGRAM OBJECTIVE:** The Program shall be managed to provide long-term enhanced shareholder value through clear and certain disclosure and accountability. Enhancing shareholder value shall always take precedence, non-financial or collateral benefits notwithstanding.
4. **PROGRAM COMPONENTS:** The Program shall consist of the following components:
 - a. Voting of Proxies: CalSTRS will make a best effort to vote all domestic and non-U.S. proxies; exceptions may be made based on the legal requirements or local conventions of certain markets and where practical difficulties make an informed and meaningful decision impossible. Voting of proxies shall be in conformance with all approved documents such as the California State Teachers’ Retirement System Corporate Governance Principles, which can be found on the CalSTRS website.
 - b. Annual Engagement Plan: CalSTRS will continue its practice of identifying for enhanced shareholder action, on an annual basis; companies in which the System holds a significant passive investment

position that are underperforming applicable performance benchmarks. In the organization and completion of this work plan, staff shall consider the market value of the investment, CalSTRS' ownership percentage, priorities identified in the annual business plan and the resources required and the direct cost involved in seeking a desired result.

“Enhanced shareholder action” includes, but is not limited to:

- Informal or formal expressions of concern to company management concerning corporate governance practices that are adversely affecting shareholder value;
 - Development of shareholder proposals, either individually or in concert with other institutional investors;
 - Participation by CalSTRS in litigation, consistent with its policy with regards thereto, in the event that the subject company's underperformance is related to matters that are or may become the subject of such litigation.
- c. Corporate Governance Organizations: CalSTRS will continue its active participation in the Council of Institutional Investors (CII), International Corporate Governance Network (ICGN) and in other forums designed to have an impact on corporate governance practices.
- d. Recognizing Good Corporate Governance in Companies: To promote improved corporate governance, CalSTRS may recognize companies that represent best practices in corporate governance.
- e. Targeted Investor Coalitions: CalSTRS will, time and circumstances permitting, partner with other institutional investors in an effort to maximize its corporate governance efforts, exclusively on behalf of the plan beneficiaries and participants.
- f. Securities Litigation: CalSTRS will manage its interests in securities litigation matters as assets of the trust fund with the goal of enhancing the long-term value of the portfolio consistent with the Investment Management Plan. Consistent with this goal, CalSTRS will pursue the following objectives:
- Increasing the net monetary value of settlements;
 - Increasing the long-term value of shares in a company subject to shareholder litigation held in CalSTRS' portfolio;

- Deterring wrongful corporate conduct that undermines the integrity of the financial markets.

In most domestic cases, CalSTRS' interests in securities class action litigation claims will be adequately addressed solely through passive participation as a class member. However, in certain circumstances a higher level of involvement will be appropriate, including:

- ***Moving for Lead Plaintiff Status in Domestic Cases:*** In securities class action cases in the United States where CalSTRS' potential damages exceed \$15 million, or in other cases where there is an exceptional opportunity to preserve or enhance the long-term value of a significant portfolio holding or to deter wrongful corporate conduct, CalSTRS will consider moving for lead plaintiff status. If staff concludes that a securities class action meets one or more of these criteria, the case will be referred to an independent third party for legal evaluation and recommendation to the Board.

The independent third party shall perform work at the direction of the General Counsel and shall be familiar with the litigation of federal and state securities cases, including but not limited to class actions, so-called "opt-out" individual actions, and derivative cases. The independent third party shall be compensated on a flat fee basis to evaluate the case and make a recommendation thereto. If needed, the independent third party shall further represent CalSTRS in the filing of a motion for lead plaintiff status if such action is approved (for which counsel shall be separately compensated), but shall not otherwise represent CalSTRS as lead class counsel in that case if CalSTRS is selected as lead plaintiff.

If the independent third party and the General Counsel recommend moving for lead plaintiff status, the matter shall be brought before the Board for approval. If, pursuant to Board approval, lead plaintiff status is sought, CalSTRS will conduct a competitive selection of lead class counsel in order to secure the most qualified counsel at a fee structure that aligns the interests of the class and lead counsel.

- ***Alternatives to Lead Plaintiff Status in Domestic Cases Requiring Board Approval:*** In some instances where seeking lead plaintiff status is not sought or where the court has denied a motion therefore, CalSTRS may consider the following alternatives: 1) Participating as a co-lead plaintiff with other institutional investors; 2) Opting out of a class and filing a separate securities action in state or federal court; 3) Filing a shareholder derivative claim in state or federal court; and 4) Formal intervention in pending litigation. If the General Counsel, based upon an evaluation of the facts and circumstances of the proposed case, recommends pursuing any such alternatives, the matter shall be brought before the Board for approval.

- ***Litigation Alternatives Delegated to Staff:*** Any action beyond those specified in this policy that would be consistent with the goal and objectives of this program, may be acted upon on the recommendation of the General Counsel and approval of the Chief Executive Officer in consultation with the Chief Investment Officer.
- ***Non-Litigation Alternatives:*** In considering the appropriate response to a company that is subject to shareholder litigation, CalSTRS will evaluate the pursuit of alternatives to litigation that address the underlying cause of the company’s problem. For example, contacting appropriate regulatory and/or law enforcement agencies about potential prosecution of wrongdoers may deter similar conduct in the future that undermines the integrity of the financial markets. As another example, filing shareholder resolutions or negotiating for corporate governance changes like the addition of independent directors or the creation of an independent audit committee may address the problems that lead to the litigation and could aid in the long-term recovery of the company and the value of its stock.

Shares purchased on a foreign exchange are not protected by United States securities laws. Therefore, CalSTRS’ interests obtained on a foreign exchange may only be addressed through active participation in a foreign jurisdiction.

- ***Foreign Securities Litigation Cases:*** In situations where CalSTRS obtained shares of an entity on a foreign market, and there are allegations of improper conduct of such entity, and there is no reasonable expectation of full recovery through the domestic legal process, CalSTRS shall consider filing or joining a foreign action against such entity. In determining whether CalSTRS should file or join a foreign action, the General Counsel will consider the following factors: (1) the strength and legitimacy of the proposed action, (2) the legal and procedural issues particular to the foreign jurisdiction, including adverse party risks and discovery requirements, (3) the exposure of CalSTRS in the foreign market and the potential recovery CalSTRS may obtain, (4) the structure of the proposed action, including the legal representation, the funding of the case, and the compensation of the legal representation and funders, (5) in the case of joining an action, the other parties who have already joined, and (6) any other potential risks involved. Upon the recommendation of the General Counsel, in consultation with the Chief Investment Officer, and with approval by the Chief Executive Officer and Chair of the Investment Committee, CalSTRS may file or join a foreign action to recover losses incurred on a foreign market.
- g. **Statement of Investment Responsibility:** The “Statement of Shareowner ESG Responsibility” and “CalSTRS 21 Risk Factors” remain in effect.
- h. **Regulatory and Legislative Advocacy:** CalSTRS will, upon the completion of sound analysis, advocate for both the institution and the repeal of laws

and regulations to improve the financial and legal market place, relative to the stated Investment Management Plan and the exclusive benefit of the plan beneficiaries and participants.

5. **BUSINESS PLAN:** The Program will be managed in accordance with a business plan which will be prepared on an annual basis and will describe CalSTRS' objectives for the next twelve-month period. The annual business plan will emphasize CalSTRS' strategic and tactical corporate governance priorities; once approved, staff will present a general implementation plan to the Investment Committee, with the expressed recognition that tactics may have to be altered in the course of the execution of the plan and that staff has the delegated authority to make the adjustments as needed and appropriate.
6. **MONITORING:** Staff shall monitor adherence to the corporate governance policy for all internal and external managed portfolios.
7. **DELEGATION OF AUTHORITY:** The Chief Investment Officer (CIO) or designee has the authority to manage the Corporate Governance Program and may use other investment personnel to implement these policies.
8. **DECISION-MAKING AUTHORITY:** Subject to the review and approval of the Investment Committee, staff shall:
 - Review and make recommendations with regard to this Policy and the California State Teachers' Retirement System Corporate Governance Principles;
 - Report on the status of current proxy votes, and recommend to the Investment Committee action to be taken on votes which do not fall within the guidelines;
 - Develop the Annual Corporate Governance Business Plan;
 - Present annual summaries of votes cast on behalf of the TRB;
 - Act as liaison between the TRB and organizations dedicated to advancing good corporate governance practices, such as the CII and ICGN;
 - Monitor developments in the corporate governance area that may affect the value of shares held by CalSTRS;
 - Develop and propose various actions related to corporate governance, including, but not limited to, shareholder resolutions, criteria for selection of companies for engagement, criteria for entering into litigation related to securities fraud and/or to accomplish the purposes of the corporate

governance policy, so long as these actions are consistent with the Investment Management Plan.

9. **REPORTING:** Staff shall present regular reports to the Investment Committee on actions and major activity.

Corporate Governance Portfolio Policy

EXECUTIVE SUMMARY

In accordance with the CalSTRS Investment Policy and Management Plan, IPMP, the California State Teachers' Retirement System Board has established an allocation for global equity securities. Within this allocation, the Chief Investment Officer has authority to authorize investment within the Corporate Governance Activist Manager Portfolio and the Corporate Governance Sustainable Manager Portfolio, collectively referred to as the Corporate Governance Portfolio. CalSTRS' Corporate Governance assets are to be invested, administered, and managed in a prudent manner for the sole benefit of its participants and beneficiaries, in accordance with the California Constitution, the Teachers' Retirement Law, and other applicable statutes. No investment instrument or activity prohibited by the IPMP shall be authorized for the Corporate Governance portfolio.

Corporate governance activist management is a type of active management where managers take large individual positions and engage boards and management to undertake value driving change. The corporate governance activist managers have an investment strategy that relies on active intervention in a company's long-term strategy, capital structure, capital allocation plan, executive compensation, and corporate governance, including, but not limited to, takeover defenses, Board structure and Board composition.

Corporate governance sustainable managers apply a traditional global equity investment approach and are characterized by the integration of environmental, social and governance (ESG) considerations into their investment portfolio construction and management. Sustainable managers can employ growth, value, thematic or quantitative investment styles.

This document is intended to summarize the fundamental objectives and considerations used in the investment, administration, and management of the Corporate Governance portfolio. These policies are designed to set boundaries that will ensure prudence and care in the management of the corporate governance assets while allowing sufficient flexibility in the management process to capture investment opportunities. CalSTRS believes that environmental, social, and governance, ESG, issues can affect the performance of our investments. As a result, the CalSTRS 21 Risk Factors have been developed as a tool that both internal and external investment managers are expected to

use to assess the impact of ESG risk when making an investment on behalf of CalSTRS. Detailed procedures and guidelines for each of the portfolios are maintained separately.

As with all other plan assets, these policies cannot be altered without explicit direction from the Board.

CORPORATE GOVERNANCE INVESTMENT POLICIES

1. Investment Objective:

The corporate governance assets shall be invested to improve the diversification of the total investment portfolio and to enhance its risk-adjusted total return. The corporate governance assets shall be invested to provide enhanced investment returns with the ancillary benefits of improving the overall market through active engagement and integration of ESG factors.

2. Performance Objective:

The CalSTRS Corporate Governance Portfolio includes U.S. and Non-U.S. equity strategies which, in aggregate, are to be structured to achieve a long-term total return in excess of the Global Equity policy benchmark. Given the specialized nature of the Corporate Governance Portfolio, individual managers are measured based on the investable universe as defined in the agreement. This may include absolute return objectives, broad market indexes, or customized benchmarks.

3. Portfolio Structure:

- i. The chief investment officer has authority to determine the allocation to the Corporate Governance portfolio, as a percentage of the global equity allocation. The Corporate Governance portfolio is constructed using limited partnership investments, separately managed accounts, and co-investments.
- ii. Within the boundaries and ranges established by this policy, staff is responsible for the selection, allocation, and oversight of externally managed portfolios. Comprehensive procedures, manager guidelines, objectives, benchmark selection, forecast tracking error, portfolio composition, including eligible securities, constraints, and trading activities are to be monitored across all Corporate Governance portfolios.
- iii. Investment restrictions included in the IPMP are hereby incorporated by reference.

4. Co-Investments:

- i. Co-investments shall be made side by side with CalSTRS external corporate governance investment advisors.
- ii. Due diligence process shall be thorough, consistent, and appropriate as defined in the Corporate Governance investment portfolio procedures.
- iii. Maximum amount of any single company investment shall not exceed \$100 million at the time of the investment.
- iv. Co-investments will be disposed of in coordination with the CalSTRS external corporate governance investment advisor who recommended the co-investment.
- v. A report on any acquisition or disposition will be presented to the Investment Committee as soon as practical after the transaction is completed.
- vi. Co-investments are limited to the publicly traded stocks domiciled in markets in which the Corporate Governance Portfolio is currently invested.
- vii. A co-investment may take the form of equity, convertible preferred equity, and warrants or a comparable instrument which provides an equity type of ownership and return.
- viii. The approval decision under delegation as it relates to co-investments shall be completed following a positive written recommendation by the external corporate governance investment advisors and CalSTRS Corporate Governance staff, with ultimate approval from the chief investment officer or deputy chief investment officer. The investment analysis and due diligence will be conducted by the Corporate Governance staff and management of the investment and corporate governance activities will be guided by the external corporate governance investment advisors.

5. Capital Calls:

- i. Capital calls will be made in accordance with the terms stated in the executed partnerships of the Corporate Governance Program.
- ii. The following non-cumulative daily limits apply with respect to the approval of trade activity within the Corporate Governance program:

Investment Officer I and II	\$ 15 million
Investment Officer III	\$ 25 million
Associate Portfolio Manager	\$ 35 million
Portfolio Manager	\$ 50 million
Director of Corporate Governance	\$ 100 million
Chief Investment Officer and Deputy Chief	

Investment Officer (Co-investments)	\$ 250 million
Chief Investment Officer and Deputy Chief Investment Officer (Capital calls)	\$ 1 billion

- iii. The delegation as it relates to capital calls shall be completed following proper notification from the corporate governance investment advisor as described in the partnership agreement. Management of the investment and corporate governance activities will be guided by the external corporate governance investment advisors.

6. **Special Situation Investments**

The Corporate Governance unit may initiate or hold investments in individual securities for the following reasons:

- i. Facilitate operational or legal segregation: in order to take advantage of certain legal rights, such as appraisal rights and/or legal proceedings, individual securities may be transferred to and held in a segregated account.
- ii. Facilitate trading and compliance of regulatory requirements when, acting as part of a group, there may be certain regulatory filings and/or trading restrictions determined by the group's holdings and/or changes in the amounts held by the group. In order to manage the filing process and prevent restricting CalSTRS internally and externally managed portfolios, Corporate Governance may make investments in an individual security to manage its holding level and facilitate trading among internal and external portfolios.
- iii. Funding of the accounts will be done at the determination of the chief investment officer and trading will be done by the Global Equity unit.

7. **Monitoring and Reporting**

The following reports will be prepared and presented to the Board, unless otherwise stated, in order to facilitate visibility of compliance monitoring and reporting according to this document:

- i. **Semi-Annual Manager Report** – prepared by staff
- ii. **Performance Report** – prepared by master custodian/consultant (semi-annually)
- iii. **Business Plan** – prepared by staff (annually)

8. Delegation of Authority

The chief investment officer or designee has the authority to manage the Corporate Governance portfolio and may use other investment personnel to implement these policies and the processes described in the procedures.

9. Board Review

The Board or the Investment Committee may review this policy periodically, as deemed appropriate and in keeping with its fiduciary standards.

Approved by the Subcommittee on Corporate Governance: October 13, 1999

Adopted by the Investment Committee: October 13, 1999

Amended by the Subcommittee on Corporate Governance: January 5, 2000

Adopted by the Investment Committee: January 5, 2000

Adopted by the Investment Committee: July 14, 2005

Amended and adopted by the Teachers' Retirement Board: April 7, 2006

Amended and adopted by the Teachers' Retirement Board: November 1, 2007

Approved by the Subcommittee on Corporate Governance: February 7, 2008

Adopted and Ratified by the Investment Committee: February 7, 2008

Amended by the Board Governance Committee on November 6, 2008

Amended by the Board Governance Committee on September 3, 2009

Reorganized by Corporate Governance Committee on April 7, 2011

Amended by the Investment Committee: February 7, 2014

Revised to move Corporate Governance Portfolio Policy from Global Equity Policy to the Corporate Governance Policy November 1, 2017

Revised to update the Corporate Governance Portfolio Policy on February 7, 2018

D. Fixed Income Investment Policy

EXECUTIVE SUMMARY

In accordance with the CalSTRS Investment Policy and Management Plan, IPMP, the California State Teachers' Retirement System Board has established an allocation for fixed income securities, a liquid and efficient market. CalSTRS' fixed income assets are to be invested, administered, and managed in a prudent manner for the sole benefit of its participants and beneficiaries, in accordance with the California Constitution, the Teachers' Retirement Law, and other applicable statutes. No investment instrument or activity prohibited by the IPMP shall be authorized for the Fixed Income portfolio.

This document is intended to summarize the fundamental objectives and considerations used in the investment, administration, and management of the Fixed Income portfolio. These policies are designed to set boundaries that will ensure prudence and care in the management of the fixed income assets, while allowing sufficient flexibility in the management process to capture investment opportunities. CalSTRS believes that environmental, social, and governance, ESG, issues can affect the performance of our investments. As a result, the CalSTRS 21 Risk Factors have been developed as a tool that both internal and external investment managers are expected to use to assess the impact of ESG risk when making an investment on behalf of CalSTRS. Detailed procedures and guidelines for each of the portfolios are maintained separately.

As with all other plan assets, these policies cannot be altered without explicit direction from the Board. A flowchart (Exhibit 1) is included to provide the context for the policies within the general process of implementing the Fixed Income portfolio. Words and terms that may be unfamiliar to the reader are referenced in the glossary.

FIXED INCOME INVESTMENT POLICY

1. Investment Objectives:

- a. **Long-term Assets** – The internally and externally managed long-term fixed income assets shall be invested to improve the diversification of the total investment portfolio and to enhance its risk-adjusted total return.
- b. **Short-term Assets** – The investment objective for the internally managed liquidity portfolio is to seek the preservation of capital and liquidity, and to generate the highest possible current income consistent with a prudent level of risk available from investing in a diversified portfolio of short-term fixed income securities.
- c. **Cash Management** – The investment objective for the cash management function is to facilitate cash needs, utilizing various tools, as directed by the chief investment officer, deputy chief investment officer, or designee, in order to minimize the cost of raising cash and limit the effect on the investment managers.

2. Performance Objectives:

The CalSTRS Fixed Income Portfolio includes core and opportunistic fixed income strategies which, in aggregate, are to be structured to achieve a long-term total return consistent with the policy benchmarks representative of the fixed income markets. Separate and distinct performance objectives and benchmarks shall be established for each of the portfolio mandates (e.g. Core, Core Plus, Short-Term, etc.), in order to determine whether each portfolio is representative of the market style adopted, and whether the performance objectives have been met.

3. Policy Benchmark:

(95%) Bloomberg Barclays U.S. Aggregate Custom Index + (5%) Bloomberg Barclays U.S. High Yield 2% Issuer Capped Custom Index.

4. Portfolio Structure:

The long-term assets will be a blend of two major strategies: 1) core and, 2) opportunistic. The core strategy represents a relatively efficient, cost-effective way to provide market-like returns over time. The opportunistic strategy is to be comprised of active portfolios with higher levels of risk and higher expected returns. It is anticipated that allocations to the core and opportunistic strategies will develop over time, as follows:

<u>Strategy</u>	<u>Mgmt. Style</u>	<u>Range</u>
Core	Enhanced Indexing	70% – 100%
Opportunistic	Active	0% – 30%

5. **Eligible Securities:**

- a. **Debt Securities** – All securities that qualify for inclusion in the performance benchmark. While the performance benchmark has clearly defined rules regarding how sectors and securities are determined to be included, securities that do not technically meet those rules but are correlated to the sector are permitted, as documented within the investment guidelines.
- b. **Derivatives** – The objectives for using derivatives are to assist in the efficient management of risk, asset allocation, and market exposures in the Fixed Income portfolio through the use of tools such as futures, options, swap agreements, or forward agreements. The implementation of the derivatives strategies shall be thoroughly vetted by staff to conform to the risk management section of this policy, along with the ranges specified within the fixed income diversification guidelines. In addition, these strategies may not increase or decrease the fixed income exposure to the total fund outside the ranges identified within the strategic asset allocation section of the IPMP. Further limitations with respect to aggregate risk control and counterparty exposure shall be documented within the investment guidelines.

6. **Risk Management:**

- a. **Tracking Error** – Portfolios are managed within predefined risk or tracking error guidelines. Tracking error can be defined as the amount of quantifiable risk an investor is willing to take relative to a benchmark. CalSTRS manages its risk using tracking error deviation as a way to control overall portfolio risk. This quantifiable risk is then budgeted among the various sub-asset classes of the Fixed Income portfolio. These risks are monitored on a daily basis by each portfolio manager and reported weekly to the director of fixed income.
- b. **Diversification** – Diversification within investment portfolios is critical in order to control risk and maximize returns. Minimum and maximum ranges with respect to investment sectors, credit exposure, and duration shall be established for the Fixed Income portfolio within the context of the performance benchmark. Such ranges shall be documented within the investment guidelines and are subject to change as conditions warrant, as determined by the director of fixed income.
- c. **Authorized Traders** – Authorization letters which specify who may transact business for the portfolio, shall be sent with a copy of the most recent investment resolution, initially at the time an account is opened, and then periodically to all fixed income

broker/dealers with whom CalSTRS conducts business. Whenever a change in authorized trader(s) takes place, the broker/dealers shall be notified in writing within 24 hours in the event of termination, and as soon as possible in the event of a newly authorized trader(s).

- d. **Trading Parameters** – The following parameters apply with respect to the non-cumulative daily trade activity within the internally managed portfolios, which include core and opportunistic fixed income assets. For overlay and transition management portfolios, tighter trading parameters may be applied.

Investment Officer I	up to 2% of related internally managed portfolio
Investment Officer II	up to 4% of related internally managed portfolio
Investment Officer III	up to 6% of related internally managed portfolio
Associate Portfolio Manager	up to 8% of related internally managed portfolio
Portfolio Manager	up to 10% of related internally managed portfolio
Director of Fixed Income	up to 5% of total Fixed Income portfolio
Deputy Chief Investment Officer	up to 10% of total Fixed Income portfolio
Chief Investment Officer	up to 10% of total Fixed Income portfolio

- e. **Short-term Assets** – No daily limits with respect to the approval of trade activity within the liquidity portfolio shall be established.
- f. **Trade Processing** – All transactions relating to the internally managed Fixed Income portfolios shall be traded within the parameters noted above and approved within the confines of guidelines that require, at a minimum, a dual release for all fixed income trades. It should be noted that the staff person releasing the trade to the custodian must be from the Investment Operations unit to ensure proper separation of duties.

7. **Fixed Income Internal/External Management:**

The Fixed Income portfolio is managed by both internal staff and external investment managers. Within the boundaries established in the procedures, the decision to hire an external manager or utilize internal investment staff for an investment strategy is made by applying a board-approved criteria matrix (Exhibit 2) to evaluate a variety of factors including, but not limited to, cost effectiveness/control, market transparency and liquidity, market efficiency, active risk, and infrastructure/resource requirements. CalSTRS uses active external management as a tool to implement a portion of its opportunistic strategies and to allocate risks where it believes there is the greatest opportunity for enhanced returns relative to the core Fixed Income portfolio.

Within the boundaries and ranges established by these policies, staff is responsible for the selection, allocation, and oversight of the external fixed income managers. Manager guidelines, objectives, benchmark selection, tracking error, portfolio composition, constraints, and trading activities are to be administered by staff and integrated into the fixed

income risk budget. CalSTRS shall also maintain a pool of managers to supplement the existing managers or replace a terminated manager, as needed.

8. **Other Strategies:**

Periodically the Board will approve investment strategies that may or may not be managed within the fixed income asset class specifically, but are instead designed to take advantage of an opportunity and/or to meet a performance objective. Unless a strategy is addressed by a specific policy of its own, Fixed Income staff is responsible for the implementation of any strategy that may be directed by the chief investment officer, deputy chief investment officer, or designee, within the boundaries and ranges established by these policies. Investment guidelines, benchmark selection, tracking error, portfolio composition, constraints, and trading activities are to be administered by staff and integrated into the CalSTRS strategic asset allocation process and risk budget.

9. **Monitoring and Reporting:**

The following reports will be prepared and presented to the Board, unless otherwise stated, in order to facilitate visibility of compliance monitoring and reporting according to this document:

- a. **Fixed Income Monthly Status Report** – prepared by staff and presented to the chief investment officer and deputy chief investment officer
- b. **Fixed Income Semi-Annual Report** – prepared by staff
- c. **Performance Report** – prepared by master custodian/consultant (semi-annually)
- d. **Investment Manager Ratings Report** – prepared by staff (semi-annually)
- e. **Business Plan** – prepared by staff (annually)

10. **Delegation of Authority:**

The investment, administration, and management of the fixed income assets and strategies are delegated to staff within the boundaries established by these policies and the processes described within the relevant investment guidelines.

11. **Board Review:**

The Board or the Investment Committee shall administer and review these policies periodically, as it deems appropriate and in keeping with its fiduciary standards.

Adopted by the Teachers' Retirement Board on July 8, 1993

Revised on June 5, 1996

Revised on April 7, 1999

Revised on October 11, 2000

Revised to adopt Lehman Agg (from Salomon LPF) benchmark on July 10, 2002

Revised to increase external management on December 7, 2005

Revised to integrate BlackRock System processes on September 7, 2006

Revised to adjust benchmark, post restructuring on April 4, 2007

Revised to integrate Cash Management function on July 13, 2007

Revised to include the Authorized Use of Derivatives on June 4, 2008

Revised to adjust the Risk Management - Trading Parameters on September 3, 2009

Revised to integrate Other Strategies management on July 9, 2010

Revised to clarify portfolio structure, derivatives and trading ranges on November 3, 2011

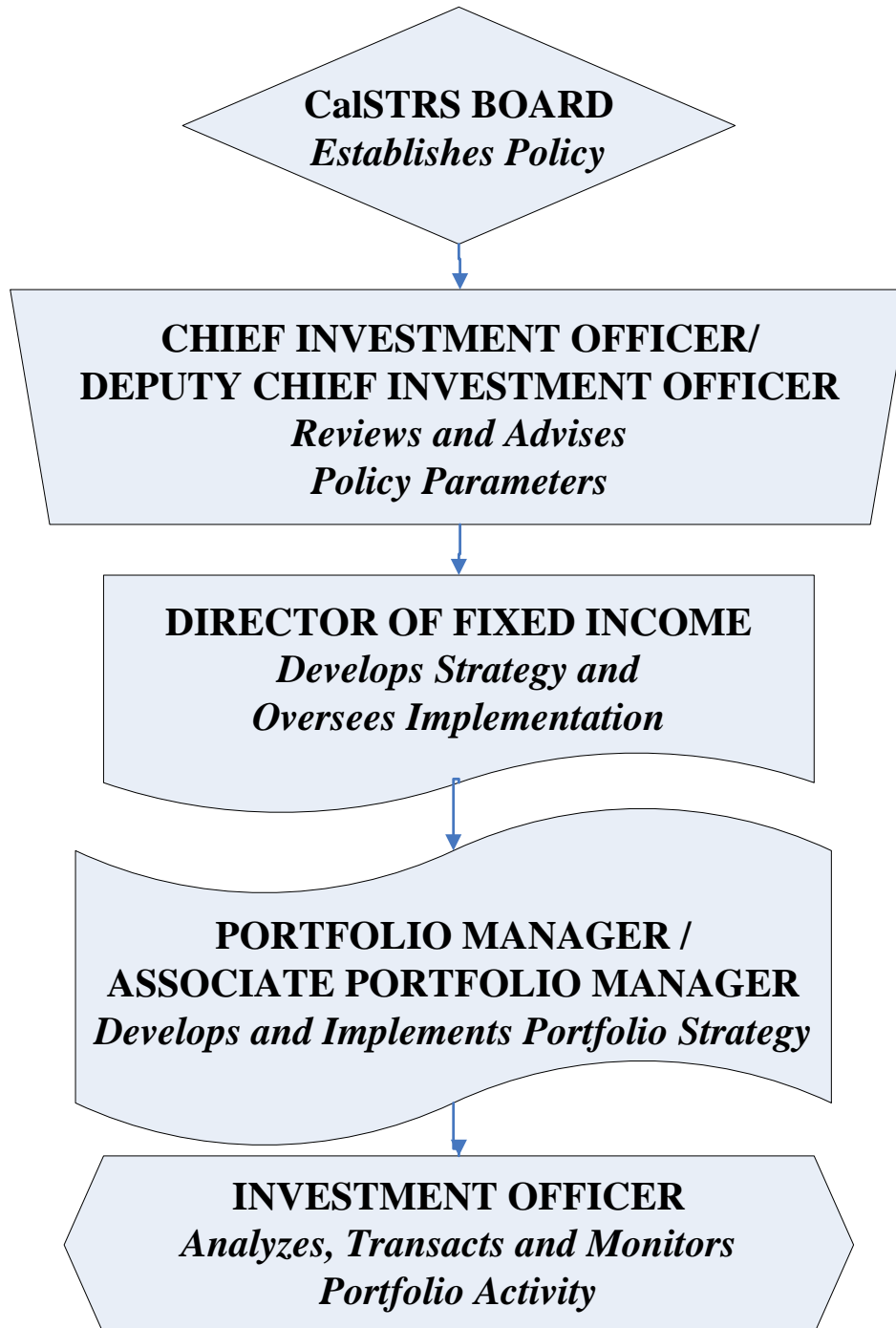
Revised to add ESG Risks policy reference on September 10, 2013

Revised to remove reference to presentation of annual report on April 4, 2014

Revised to update benchmark, on November 16, 2016

Revised to define APM trading limits, updated flowchart (Exhibit 1) to reflect APM in the hierarchy and reflect new reporting frequency on April 5, 2017

POLICY IMPLEMENTATION FLOWCHART



INTERNAL / EXTERNAL DECISION CRITERIA MATRIX

		Low	Medium	High
<u>Decision Factors</u>	Cost-Effectiveness/ Control	External	External/Internal	Internal
	Market Liquidity & Transparency	External	External/Internal	Internal
	Market Efficiency	External	External/Internal	Internal
	Active Risk	Internal	External/Internal	External
	Infrastructure/ Resource Requirements	Internal	External/Internal	External

Cost-Effectiveness/Control

After including all costs, is internal management able to add more value than external management? All things being equal, management fees increase in direct relation to the risk and complexity of the strategy being managed. Given the narrower band for tracking error (i.e., risk) described earlier in this paper, passive management usually provides opportunities for more cost-effective management of assets, while active management presents the potential to generate alpha. For active management to make sense in the Portfolio, the strategy must generate returns in excess of the benchmark net of management fees which, as discussed in last year’s active/passive study, is difficult to accomplish consistently.

The decision to manage a portfolio internally or externally should not be based solely on who provides the cheapest management fees. Even though many studies have shown that internal asset management typically has a lower cost structure than external management, a more holistic view should be used in the decision making process, which includes control of the assets and market awareness of internal staff. Internal management, it has been argued, allows better coordination over when and how assets are deployed, permits greater control over corporate governance issues, and allows for a more straightforward mechanism to customize investment mandates that align with a plan sponsor’s unique directives. In other words, internal management is able to focus on CalSTRS as its one and only client, versus the multiple accounts among which

an external manager must divide its attention. Also, as internal staff begins to manage new strategies, staff should continue to identify additional ways to take advantage of market inefficiencies when they occur. It should be noted, however, that building in-house investment management expertise can be difficult, given the employment and hiring practices dictated by State employment.

While there seem to be many benefits to internal management, we should recognize that bringing assets in-house requires significant up-front costs which can then be amortized over the investment period. These costs include sufficient staffing levels, computer support systems, specialized software/technology, and access to investment-related data. It is clear that building and sizing the infrastructure, risk management and trading systems, and people are critical to investment success. The same criteria we apply to external managers in terms of people, process, and philosophy apply internally, as well. However, once an infrastructure has been established for an asset class, the incremental costs of adding new strategies may be minimal, depending upon the strategy.

Market Transparency and Liquidity

Does the market have enough liquidity and transparency to allow for effective management of the strategy? While it appears that the internal versus external management debate centers around the public (i.e., fixed income and equity) markets, as opposed to the private markets (i.e., private equity and real estate), it is really the transparency and liquidity of the markets within which each strategy trades that is the primary decision factor.

Private markets are generally less transparent and liquid than other asset classes within the Fund. Public equity and debt markets are more transparent, have broadly and widely recognized indices, are highly liquid, and are amenable to structuring a broadly diversified portfolio. This liquidity and transparency, in terms of widely followed market information and pricing, make equity and fixed income portfolio management a different kind of management challenge, as the assets are broadly available for purchase and sale to all with a mandate and the proper business infrastructure/resources.

Market Efficiency

Does the strategy operate in a market that is efficient or inefficient? Market efficiency refers to the degree that all investors in a market have access to the same information and, at any given time, security prices reflect all available market information. The decision to manage an active or passive strategy should be directly based on the efficiency of the market. For markets that are considered highly efficient, the probability of consistently outperforming the market is relatively low, which suggests that a passive/core strategy would be appropriate. In markets that are less efficient, the opportunity exists to generate alpha. Finding these market inefficiencies requires dedicated resources to identify securities that are considered mispriced. When these inefficiencies are evident, a skilled active manager can take advantage of these opportunities and construct a portfolio that should generate fee-adjusted returns in excess of the market.

Active Risk

Does internal staff have the knowledge and competence to manage the strategy in house? An active strategy requires highly specialized and skilled individuals who are well versed in the pursued strategy and willing to make educated decisions to take prudent risk, in order to achieve a net return higher than the benchmark. A passive or less active strategy still requires skilled individuals; however, the goal of this type of strategy is to track or slightly exceed the strategy's benchmark, and the research effort is much less intensive than active managers.

Private equity and real estate are uniquely active markets in which expertise, in terms of property or company type, leverage, deal structure, deal components, and terms, make them truly active investments requiring resources capable of reviewing the fundamentals of the deal structure and capital to fund the deal. With internal management, recruiting investment professionals who have highly specialized skills in active strategies may be difficult. CalSTRS' compensation structure and the current environment of state budget cuts may provide a headwind to attracting new investment talent. There is also the potential for key investment staff turnover. This will always be a concern in both internal and external portfolios. CalSTRS, like external managers, would seek to construct a bench of talent for any strategy undertaken.

Infrastructure/Resource Requirements

Does CalSTRS have sufficient infrastructure and the resources to support the strategy? Technology and risk management systems, along with proper staffing levels (front and middle office) are a key ingredient to operating a successful investment management operation. CalSTRS has gained much of this experience over the last 20 years through the development of our own internal infrastructure, in terms of communications, specialized investment software, and analytical criteria needed to operate in the public fixed income and equity markets, as well as our exposure to external managers.

GLOSSARY

ACTIVE STRATEGY – Objective is to maximize returns above a specified benchmark while minimizing risk exposure. This can be achieved by correctly forecasting broad market trends and/or identifying particular mispriced sectors of a market or securities in a market. Conversely, a passive strategy focuses on providing a return that closely mimicks the return of a benchmark.

AGENCY SECURITIES – Investments issued by federal corporations and federally sponsored corporations that are able to issue debt at a lower cost to such constituencies as farmers, homeowners, and students.

ASSET-BACKED SECURITIES (ABS) – Investments that are collateralized by assets such as automobile loans, agricultural equipment loans, and credit card loans. The loans feature credit enhancements that lead to high credit ratings and limited investor exposure to the credit of the seller.

BASIS POINT – One hundredth of one percent (.01%); .0001 in decimal form.

BREAKEVEN INFLATION – The level of future inflation required to obtain similar returns between an investment in linkers/TIPS and an investment in nominal bonds; expressed as the difference between nominal and real yields.

BROAD MARKET-WEIGHTED PERFORMANCE BENCHMARK – With a market-weighted benchmark, the weighting of each asset class within the benchmark may change due to the market capitalization. Conversely, with a fixed-weighted benchmark, the weightings of each asset class are held constant.

CASH FORECAST – The projection provided by CalSTRS' Operations unit of the sources and uses of cash for CalSTRS in the immediate future.

COLLATERAL – Securities and other property pledged by a borrower to secure payment of a loan.

COMMERCIAL MORTGAGE-BACKED SECURITIES (CMBS) – Investments that are collateralized by commercial real estate mortgages. Similar to a mortgage backed security where payments to investors are received out of the interest and principal of the underlying mortgages.

COMPETITIVE BIDS/OFFERS – The practice of soliciting more than one bid or offer for a security transaction. It is based on an identifiable asset in accordance with identified fixed rules for all participants.

CORPORATE BOND – A financial obligation for which the issuer, -a company, promises to pay the bondholders a specified stream of cash flows, including periodic interest and a principal repayment.

CREDIT RATING – A relative ranking of timely interest payment and principal repayment based on past records of debt repayment, current financial status, and future outlook for the company.

DERIVATIVE – A derivative is a security whose price/return is dependent upon the price/return of some other underlying asset. Futures contracts, forward contracts, options and swaps are the most common types of derivatives.

DIVERSIFICATION – Investing in a wide range of securities/or asset classes in order to reduce financial risk.

DURATION – The weighted average maturity of the present value of a bond's cash flow stream. A measure of the change in price for a small movement in interest rates.

ENHANCED INDEXING STRATEGY – A technique for making relatively small adjustments to an indexed portfolio in order to increase the return slightly above the return on the index.

FAILED TRADE – Purchased or sold investment securities that are not delivered on the contracted settlement date.

FEDERAL RESERVE – The independent central bank that influences the supply of money and credit in the United States through its control of bank reserves. Also called the Fed.

FISCAL STIMULUS – A fiscal policy of incurring budget deficits to stimulate a weak economy.

FUNDAMENTAL ENVIRONMENT – The economic environment encompassing: interest rates, inflation, gross national product, unemployment, inventories and consumer spending.

HIGH YIELD SECURITIES – A higher-risk debt security that is rated less than Baa3/BBB- by the rating agencies.

INDEX – A defined representative collection of securities used to measure the change in value of the securities market on a monthly basis.

INDEXED PORTFOLIO – A portfolio which replicates a broad market index, benchmark. Objective is to minimize tracking while providing market returns.

INFLATION – The general upward price movement of goods and services in an economy over a period of time.

INFLATION LINKED BONDS [aka linkers or, in the U.S., TIPS (Treasury Inflation-Protected Securities)] – Bonds aimed to preserve the purchasing power of the bondholder or to compensate for inflation experienced over the life of the bond.

INVESTMENT GRADE SECURITIES – Investment-grade is restricted to those bonds rated Baa3/BBB- and above by the rating agencies.

INVESTMENT OFFICER – Any one of the in-house investment professionals in the CalSTRS Fixed Income unit.

LINKERS – Inflation linked bonds.

LIQUIDITY – The ease with which a bond can be purchased or sold at a fair price in a timely manner.

LIQUIDITY PORTFOLIO – For CalSTRS' purposes, this is the Short-Term Fixed Income portfolio that provides cash flow for funding transactions for CalSTRS, such as benefit payments, investment manager activity, and asset allocation. Examples of short-term investments include U.S. Treasury, Agency, and money market securities (commercial paper, certificates of deposit, Eurodollar deposits, and repurchase agreements).

MARKET CYCLE – Generally considered to be three to five years.

MONETARY STIMULUS – The Federal Reserve manipulates the money supply either through open market transactions, member bank reserve requirements, or through changing the discount rate.

MORTGAGED-BACKED SECURITY (MBS) – A security that is issued by a federal agency, such as the Federal Home Loan Mortgage Corporation, the Federal National Mortgage Association, or the Government National Mortgage Association, that is backed by mortgages. Payments to investors are received out of the interest and principal of the underlying mortgages.

NOMINAL BOND – A fixed-rate bond.

NOMINAL YIELDS – The yields of a fixed-rate bond.

PAR VALUE – The underlying stated value of a bond. The par value serves as the basis for calculating coupon payments and settlement details.

PORTFOLIO – A collection of stocks, bonds, or money market securities owned by an investor and segmented by a predefined method.

POSITION – The status of securities, futures, and options in an account, long or short.

PRINCIPAL PAYDOWN – The portion of a periodic payment that reduces the amount of the principal.

REAL YIELDS – The yields of an inflation-linked bond.

QUALITY RANGES – Guidelines for the percentage of market value of a particular credit rating within a portfolio.

QUANTITATIVE ANALYSIS – Applies mathematical and statistical techniques to a single market sector (e.g., equity or debt) or to asset allocation.

RATE OF RETURN – The total income received over a period of time including interest income, accretion of discount, amortization of premium, and change of market value; usually expressed as a percentage or in decimal format.

REFERENCE PRICE INDEX – An index that measures the nominal cost of a representative basket of consumer goods in the economy. In the U.S., this index is the Consumer Price Index, CPI.

SECURITIZED ASSETS – Debt investments that are collateralized by assets. Examples include: MBS, CMBS and ABS.

SETTLEMENT DATE – For each security transaction, a price is established based on the specifics of the security and the payment date. The payment date, or when the security is exchanged for value, is called the settlement date.

SPLIT-RATED – The credit ratings of corporate and other securities are made by independent services such as Moody's, Standard & Poor's and Fitch. When a security receives ratings that are different among the rating services, the term "split-rated" is used to signify this difference in relative credit ratings.

TECHNICAL ENVIRONMENT – Evaluates the environment through historical market activity, such as prices and volume, and uses charts to identify patterns that may suggest future activity and/or trends.

TRACKING ERROR – The deviation of the portfolio's rate of return from that of the target index or performance benchmark.

UNITED STATES TREASURY SECURITIES – Debt issues of the U.S. Government, such as Treasury bills, notes, and bonds.

WHOLE LOANS – A secondary mortgage market term which refers to an investment in an original mortgage loan, versus a loan which participates in a secured pass-through security.

E. Home Loan Program Policy

EXECUTIVE SUMMARY

The System's assets are to be invested, administered, and managed in a prudent manner for the sole benefit of its participants and beneficiaries, in accordance with the California State Teachers' Retirement Law and other applicable statutes. As stated within Section 22360 of the Teacher's Retirement Law, notwithstanding any other provision of law, the Board may, pursuant to Section 22203 and in conformance with its fiduciary duty set forth in Section 22250, enter into correspondent agreements with private lending institutions within California to utilize the retirement fund to invest in residential mortgages, including assisting members, through financing, to obtain homes within the state. Furthermore, the Board shall include a procedure whereby a borrower may obtain 100% financing for the purchase of a single family dwelling within specified criteria. No investment instrument or activity prohibited by the Investment Resolution adopted by the Board in 1984, as amended from time to time, shall be authorized for the fixed income portfolios/programs.

This document is intended to summarize the fundamental objectives and considerations used in the investment, administration, and management of the CalSTRS' HLP. These policies are designed to set the boundaries that will ensure prudence and care in the implementation of the program, while allowing sufficient flexibility in developing a program that is competitive and relevant. Detailed procedures and guidelines for the HLP are maintained separately.

As with all other Plan assets, these policies cannot be altered without explicit direction from the Board.

A flow chart is included to provide the context for the policies within the general process of implementing the HLP. Words and terms that may be unfamiliar to the reader are referenced in the Glossary.

NOTE: The information addressed in the introductory paragraph and "Laws and Statutes" portion of the 2002 policy document are incorporated within the Executive Summary page of this 2006 revision.

1. **PROGRAM OBJECTIVES** – The strategic objective for CalSTRS' Home Loan Program is to meet the investment goals of the System by generating a mortgage asset, while providing the opportunity for home ownership to qualified participants.
2. **PERFORMANCE OBJECTIVES** – The CalSTRS Home Loan Program generates mortgage assets that are either managed as part of the mortgage allocation within the Fixed Income Portfolio, or sold in the financial markets. As a result, the HLP is held to the same investment standard as the other mortgage related assets within the Fixed Income Portfolio.
3. **PROGRAM BENCHMARK** – Lehman Brothers Mortgage-Backed Securities Index.

4. **PROGRAM STRUCTURE**

- a. **Loan Rates** -- Loan rates shall be periodically reviewed and adjusted to provide Mortgage Loans to borrowers consistent with the financial integrity of the HLP and the sound and prudent investment of the retirement fund. Under no circumstances, however, shall the interest rates offered to borrowers be lower than the market rate. The rate-setting process shall be documented within the HLP Guidelines.
- b. **Property Types** -- Mortgage Loans shall be made available to borrowers for the purchase or refinance of single-family dwellings, two-family dwellings, three-family dwellings, four-family dwellings, single-family cooperative apartments, and single-family condominiums.
- c. **Terms and Conditions** -- Mortgage Loans shall be made available under the following terms and conditions:
 - Borrowers shall occupy the homes as their principal residence.
 - Mortgage Loans shall be secured primarily by the property purchased or refinanced, and shall not exceed the appraised value of that property.
 - Mortgage Loans shall be available only for the purchase or refinance of homes in the State of California.
 - Appropriate administrative costs of implementing this program shall be paid by the participating borrowers. These costs may be included in the loan amount.
 - In no event shall the loan amount exceed two times the conforming loan limit of Fannie Mae or Freddie Mac, whichever is higher.
 - Prepayment penalties may be assessed on the Mortgage Loans in accordance with the rules and regulations established by the Board.
- d. **Loan-to-Value Ratios (LTV)** -- The terms and conditions shall provide a loan-to-value ratio of up to 100% of the appraised value of the property.

The portion of any loan exceeding 80% of value shall be insured by an admitted mortgage guaranty insurer conforming to Chapter 2A (commencing with Section 12640.01) of Part 6 of Division 2 of the Insurance Code, in an amount so that the un-guaranteed portion of the loan does not exceed 75% of the market value of the property, together with improvements thereon.

5. **RISK MANAGEMENT**

- a. **Authorized Signers** -- Authorization letters, which specify who may transact business on behalf of CalSTRS, shall be sent to the appropriate parties, initially at the time an account is opened, and then periodically to all HLP counterparties with whom CalSTRS conducts business. Whenever a change in authorized signers occurs, the affected parties shall be notified in writing within 24 hours, in the event of termination, and as soon as possible, in the event of a newly authorized signer(s).

b. **Authorization Limits** -- The following daily limits apply with respect to the approval of trade activity within the HLP portfolio(s):

- Investment Officer I \$5 million
- Investment Officer II \$10 million
- Investment Officer III \$20 million
- Portfolio Manager \$35 million
- Director of Fixed Income \$50 million
- Chief Investment Officer \$100 million

c. **Trade Processing** -- Prior to being released from Fixed Income, all transactions relating to the HLP shall be authorized within the limits noted above, and approved within the confines of guidelines that require, at a minimum, a dual release for all fixed income trades. It should be noted that the staff person authorizing the trade must not be the trader.

6. **MONITORING AND REPORTING** -- The following reports will be prepared in order to facilitate visibility of compliance monitoring and reporting according to this document:

a. **Compliance Report** -- prepared by Staff to CIO* (monthly)
*this report is not presented to the Board

b. **Home Loan Program Annual Report** -- prepared by Staff (annually)

c. **Business Plan** -- prepared by Staff (annually)

The HLP will be managed in accordance with a Business Plan that will be presented to the Board annually. This plan will include a broad overview of the housing and mortgage environment, along with the key issues associated with the management of the HLP, as well as future objectives and a resource allocation study for the Board's review and approval.

7. **DELEGATION OF AUTHORITY** -- The investment, administration, and management of the HLP is delegated to staff within the boundaries established by these policies and the processes described within the HLP Guidelines.

8. **BOARD REVIEW** -- The Board shall administer and review these policies periodically, as it deems appropriate and in keeping with the investment standard.

Adopted By The Teachers' Retirement Board In November 1986

Revised On August 20, 1990

Revised On November 4, 1998

Revised On April 7, 1999

Revised On January 5, 2000

Revised On October 11, 2000

Revised On March 6, 2002

Revised On February 2, 2006

F. Currency Management Program Policy

EXECUTIVE SUMMARY

In accordance with the Investment Policy and Management Plan, IPMP, the California State Teachers' Retirement System Board has established a strategic allocation to global (i.e., U.S. and non-U.S.) public and private equity assets. Considering this commitment to non-U.S. assets and the impact that currency fluctuations can have on the total return of dollar-based investors, CalSTRS has recognized the need to implement and maintain strategies designed to address the management of currency risk.

The Currency Management Program, CMP, is to be managed in a prudent manner for the sole benefit of its participants and beneficiaries, in accordance with the California Constitution, the Teachers' Retirement Law, and other applicable statutes. No investment instrument or activity prohibited by the IPMP shall be authorized for the Currency Management Program.

CalSTRS believes that the CMP should emphasize the protection of the value of its non-U.S. public and non-U.S. private equity assets (i.e. Private Equity and Real Estate) against a strengthening U.S. dollar first, yet recognizes that there also exists opportunities for alpha generation within the currency markets.

This document is intended to summarize the fundamental objectives and considerations used in the investment, administration, and management of the CMP. These policies are designed to set boundaries that will ensure prudence and care in the management of the CMP while allowing sufficient flexibility in the management process to capture investment opportunities. CalSTRS believes that environmental, social, and governance, ESG, issues can affect the performance of our investments. As a result, the CalSTRS 21 Risk Factors have been developed as a tool that both internal and external investment managers are expected to use to assess the impact of ESG risk when making an investment on behalf of CalSTRS. Detailed procedures and guidelines for CMP are maintained separately.

As with all other plan assets, these policies cannot be altered without explicit direction from the Board.

A flow chart (Exhibit 1) is included to provide context for the policies within the general process of implementing the CMP. Words and terms that may be unfamiliar to the reader are referenced in the glossary.

CURRENCY MANAGEMENT PROGRAM (CMP) POLICY

1. Program Objectives:

The strategic objectives for the CMP include: 1) the preservation of the diversification benefits of holding foreign denominated (public and private) assets, while protecting the translation value of those underlying assets when there is the risk that the U.S. dollar, USD, may strengthen; 2) return enhancement in a declining USD environment and; 3) the facilitation of currency positions for the acquisition/disposition of non-U.S. denominated investments within the parameters established by these policies. Monitoring and oversight of the implementation of the CMP shall come under the purview of the Director of Fixed Income.

2. Performance Objectives:

The CMP includes core and opportunistic strategies which, in aggregate, are to be structured to add alpha to the total investment portfolio. Separate and distinct risk-adjusted performance objectives shall be established for each of the program mandates (i.e., core and opportunistic), in order to determine whether the performance objectives have been met.

3. Program Benchmark:

The performance of the CMP shall be evaluated based on risk-adjusted total return measures relative to the notional value (in USD) of the underlying foreign denominated assets over a business cycle of three to five years.

4. Program Structure:

The CMP will be a blend of two major strategies: 1) core and, 2) opportunistic. The core strategy will be actively managed by internal staff with relatively low annual volatility. The opportunistic strategy is to be comprised of active external portfolios with higher levels of annualized volatility and higher expected returns. It is anticipated that allocations to the core and opportunistic strategies will develop over time, as follows:

<u>Strategy</u>	<u>Mgmt. Style</u>	<u>Range</u>
Core	Active (lower volatility)	70% – 100%
Opportunistic	Active	0% – 30%

5. **Eligible Currencies:**

The following currencies are authorized:

- a. The core CMP will be limited to those represented by the Australian dollar, the British Pound sterling, the Canadian dollar, the Euro, the Japanese yen, and the Swiss franc. Positions for any other currencies must be pre-approved by the Investment Committee, on a case-by-case basis.
- b. Currency positions in reference to the facilitation of the acquisition/disposition of non-U.S. denominated investments shall be at the direction of each asset class according to prescribed guidelines and controls. Currency transactions executed for this strategy are not limited to the currencies as stated within Section 5.a above.

6. **Risk Management:**

- a. **Counterparty Exposure** - A counterparty's inclusion within the core CMP shall be evaluated based upon the expertise and financial capacity of the firm. Due to the extended settlement practices, credit quality and size limitations will be established and documented within the CMP guidelines and are subject to change as conditions warrant, as determined by the director of fixed income.
- b. **Position Range** - The position range within the core CMP has been designed to allow for some degree of symmetry around the underlying exposure to foreign denominated assets within the total investment portfolio in order to both protect the translation value of the assets against a strengthening USD and to enhance returns in a declining USD environment. Therefore, the position range shall be -25 percent to 50 percent of the total notional value (in USD) of the non-U.S. public and non-U.S. private (i.e. Private Equity and Real Estate) equity portfolios.
- c. **Permitted Instruments** - Currency futures and forwards, with a maximum value date of up to one year from the spot date, and currency options are permitted to establish the currency positions in the core CMP.
- d. **Authorized Traders** - Authorization letters which specify who may transact business for the core CMP, shall be sent with a copy of the most recent investment resolution, initially at the time an account is opened, and then periodically to all counterparties with whom CalSTRS conducts currency business. Whenever a change in authorized traders takes place, the counterparties shall be notified in writing within 24 hours in the event of termination and as soon as possible in the event of a newly authorized trader(s).

- e. **Trading Parameters** - The following parameters apply with respect to the non-cumulative daily currency trade activity within the core CMP:

Investment Officer I	up to 1% of the core (notional) program
Investment Officer II	up to 2% of the core (notional) program
Investment Officer III	up to 3% of the core (notional) program
Associate Portfolio Manager	up to 4% of the core (notional) program
Portfolio Manager	up to 5% of the core (notional) program
Director of Fixed Income	up to 5% of the total non-USD holdings
Deputy Chief Investment Officer	up to 10% of the total non-USD holdings
Chief Investment Officer	up to 10% of the total non-USD holdings

Note: Notional amount parameters are intended to take into account the position range referenced in paragraph 5b, above (i.e., -25 percent to +50 percent).

- f. **Trade Processing** - All transactions relating to the core CMP shall be traded within the parameters noted above and approved within the confines of guidelines that require, at a minimum, a dual-release for all currency trades. It should be noted that the staff person releasing the trade to the custodian must be from the Investment Operations unit to ensure proper separation of duties.

7. CMP Internal/External Management:

The CMP is managed by both internal staff and external investment managers. The decision to hire an external manager or utilize internal investment staff for an investment strategy is made by applying a board-approved criteria matrix (Exhibit 2) to evaluate a variety of factors including, but not limited to, cost effectiveness/control, market transparency and liquidity, market efficiency, active risk, and infrastructure/resource requirements. CalSTRS uses active external currency specialists as an additional resource and to provide an additional layer of diversification to the CMP.

Within the boundaries and ranges established by these policies, staff is responsible for the selection, allocation, and oversight of the external currency managers. Manager guidelines, objectives, benchmark selection, volatility parameters, constraints and trading activities are to be administered by staff and integrated into the currency management risk budget. CalSTRS shall also maintain a pool of managers to supplement the existing managers or replace a terminated manager as needed.

8. Other Strategies:

Periodically the Board will approve investment strategies that may or may not be managed within the CMP specifically, but are instead designed to take advantage of an opportunity and/or to meet a performance objective. Unless a strategy is addressed by a

specific policy of its own, CMP staff is responsible for the implementation of any currency strategy that may be directed by the chief investment officer and deputy chief investment officer.

9. Monitoring and Reporting:

The following reports will be prepared and presented to the Board, unless otherwise stated, in order to facilitate visibility of compliance monitoring and reporting according to this document:

- a. Currency Status Report** - prepared by Operations and Fixed Income staff and presented to the chief investment officer and deputy chief investment officer (monthly)
- b. Performance Report** - prepared by the master custodian/consultant to the Board (semi-annually)
- c. Investment Manager Ratings** - prepared by staff (semi-annually)
- d. Business Plan** - prepared by Staff (annually)

10. Delegation of Authority:

The investment, administration, and management of the Currency Management Program is delegated to staff within the boundaries established by these policies and the processes described within the relevant Investment guidelines.

11. Board Review:

The Board or the Investment Committee shall administer and review these policies periodically as it deems appropriate and in keeping with its fiduciary standards.

Adopted by the Teachers' Retirement Board on July 12, 1995
Revised to reflect addition of Italy & Switzerland as approved currencies on January 7, 1998
Revised to reflect policy format changes on June 2, 1999
Revised to reflect Principal Inv. Officer addition to authorized limits on October 11, 2000
Revised to adopt program statement of philosophy on December 4, 2002
Revised to include Private Equity & Real Estate assets & other hedging tools on April 7, 2005
Revised to include return enhancement objective & approve external managers on June 7, 2006
Revised to reflect risk management system process changes on September 7, 2006
Revised to update the trading parameters and oversight responsibilities on February 4, 2010
Revised to add ESG language and Other Strategies on April 4, 2014
Revised to define APM trading limits and updated flowchart (Exhibit 1) to reflect APM in the hierarchy on April 5, 2017

POLICY IMPLEMENTATION FLOWCHART



INTERNAL / EXTERNAL DECISION CRITERIA MATRIX

		Low	Medium	High
<u>Decision Factors</u>	Cost-Effectiveness/ Control	External	External/Internal	Internal
	Market Liquidity & Transparency	External	External/Internal	Internal
	Market Efficiency	External	External/Internal	Internal
	Active Risk	Internal	External/Internal	External
	Infrastructure/ Resource Requirements	Internal	External/Internal	External

Cost-Effectiveness/Control

After including all costs, is internal management able to add more value than external management? All things being equal, management fees increase in direct relation to the risk and complexity of the strategy being managed. Given the narrower band for tracking error (i.e., risk) described earlier in this paper, passive management usually provides opportunities for more cost-effective management of assets, while active management presents the potential to generate alpha. For active management to make sense in the Portfolio, the strategy must generate returns in excess of the benchmark net of management fees which, as discussed in last year’s active/passive study, is difficult to accomplish consistently.

The decision to manage a portfolio internally or externally should not be based solely on who provides the cheapest management fees. Even though many studies have shown that internal asset management typically has a lower cost structure than external management, a more holistic view should be used in the decision making process, which includes control of the assets and market awareness of internal staff. Internal management, it has been argued, allows better coordination over when and how assets are deployed, permits greater control over corporate governance issues, and allows for a more straightforward mechanism to customize investment mandates that align with a plan sponsor’s unique directives. In other words, internal management

is able to focus on CalSTRS as its one and only client, versus the multiple accounts among which an external manager must divide its attention. Also, as internal staff begins to manage new strategies, staff should continue to identify additional ways to take advantage of market inefficiencies when they occur. It should be noted, however, that building in-house investment management expertise can be difficult, given the employment and hiring practices dictated by State employment.

While there seem to be many benefits to internal management, we should recognize that bringing assets in-house requires significant up-front costs which can then be amortized over the investment period. These costs include sufficient staffing levels, computer support systems, specialized software/technology, and access to investment-related data. It is clear that building and sizing the infrastructure, risk management and trading systems, and people are critical to investment success. The same criteria we apply to external managers in terms of people, process, and philosophy apply internally, as well. However, once an infrastructure has been established for an asset class, the incremental costs of adding new strategies may be minimal, depending upon the strategy.

Market Transparency and Liquidity

Does the market have enough liquidity and transparency to allow for effective management of the strategy? While it appears that the internal versus external management debate centers around the public (i.e., fixed income and equity) markets, as opposed to the private markets (i.e., private equity and real estate), it is really the transparency, and liquidity of the markets within which each strategy trades that is the primary decision factor.

Private markets are generally less transparent and liquid than other asset classes within the Fund. Public equity and debt markets are more transparent, have broadly and widely recognized indices, are highly liquid, and are amenable to structuring a broadly diversified portfolio. This liquidity and transparency, in terms of widely followed market information and pricing, make equity and fixed income portfolio management a different kind of management challenge, as the assets are broadly available for purchase and sale to all with a mandate and the proper business infrastructure/resources.

Market Efficiency

Does the strategy operate in a market that is efficient or inefficient? Market efficiency refers to the degree that all investors in a market have access to the same information and, at any given time, security prices reflect all available market information. The decision to manage an active or passive strategy should be directly based on the efficiency of the market. For markets that are considered highly efficient, the probability of consistently outperforming the market is relatively low, which suggests that a passive/core strategy would be appropriate. In markets that are less efficient, the opportunity exists to generate alpha. Finding these market inefficiencies requires dedicated resources to identify securities that are considered mispriced. When these inefficiencies are evident, a skilled active manager can take advantage of these opportunities and construct a portfolio that should generate fee-adjusted returns in excess of the market.

Active Risk

Does internal staff have the knowledge and competence to manage the strategy in house? An active strategy requires highly specialized and skilled individuals who are well versed in the pursued strategy and willing to make educated decisions to take prudent risk, in order to achieve a net return higher than the benchmark. A passive or less active strategy still requires skilled individuals; however, the goal of this type of strategy is to track or slightly exceed the strategy's benchmark, and the research effort is much less intensive than active managers.

Private equity and real estate are uniquely active markets in which expertise, in terms of property or company type, leverage, deal structure, deal components, and terms, make them truly active investments requiring resources capable of reviewing the fundamentals of the deal structure and capital to fund the deal. With internal management, recruiting investment professionals who have highly specialized skills in active strategies may be difficult. CalSTRS' compensation structure and the current environment of state budget cuts may provide a headwind to attracting new investment talent. There is also the potential for key investment staff turnover. This will always be a concern in both internal and external portfolios. CalSTRS, like external managers, would seek to construct a bench of talent for any strategy undertaken.

Infrastructure/Resource Requirements

Does CalSTRS have sufficient infrastructure and the resources to support the strategy? Technology and risk management systems, along with proper staffing levels (front and middle office) are a key ingredient to operating a successful investment management operation. CalSTRS has gained much of this experience over the last 20 years through the development of our own internal infrastructure, in terms of communications, specialized investment software, and analytical criteria needed to operate in the public fixed income and equity markets, as well as our exposure to external managers.

GLOSSARY

APPROVED CURRENCIES – The currencies of the countries where positions are permitted. For the Core portion of the CalSTRS Currency Management Program, the countries available to establish positions in are limited to those represented by the Euro, Japan, Switzerland, United Kingdom, Australia, and Canada approximately 80 percent of our overall non-U.S. dollar exposure.

BENCHMARK – A point of reference that serves as a standard for something’s performance to be measured against. When evaluating performance of any investment, it is important to compare against the right benchmark. The benchmark for the performance of the CalSTRS Currency Management Program is based on risk-adjusted total return measures relative to the notional value (in U.S. dollars) of the underlying foreign denominated assets over a business cycle of three to five years.

COUNTERPARTY – An individual or organization on the opposite side of a trade.

CROSS-HEDGING – Hedging the risk of one currency by buying or selling another currency. Because the different currencies are similar but not identical, additional risk may incur.

CURRENCY – Any form of money that is in public circulation.

CURRENCY EFFECT – The gain or loss on foreign investments due to changes in the relative value of assets denominated in a currency other than the principal currency. A rising domestic currency means foreign investments will result in lower returns when converted back to the domestic currency. The opposite is true for a declining domestic currency.

CURRENCY FORWARD – A forward contract that locks-in the price an entity can buy or sell currency on a future date (also known as the value date). In currency forward contracts, the contract holders are obligated to buy or sell the currency at a specified future date. These contracts cannot be transferred.

CURRENCY FUTURES – A transferable futures contract that specifies the price at which a specified currency can be bought or sold at a future date. Since these contracts are marked-to-market daily, investors can—by closing out their position—exit from their obligation to buy or sell the currency prior to the contract’s delivery date.

CURRENCY HEDGING – A strategy used to manage the risk associated with holding non-U.S. assets in its local currency.

CURRENCY OPTION – A contract that grants the holder the right, but not the obligation, to buy or sell currency at a specified price during a specified period of time.

CURRENCY OVERLAY – The outsourcing of currency risk management to a specialist firm, known as the overlay manager. This is used in international investment portfolios to separate the

management of currency risk from the asset allocation and security selection decisions of the investor's money managers. The overlay manager's positions are "overlaid" on the portfolios created by the other money managers, whose activities continue unaffected.

CURRENCY RISK – The risk related to currency fluctuations. For CalSTRS, it is the fluctuation of any foreign currency compared to the U.S. dollar. Non-U.S. investments are complicated by the currency fluctuation and conversion between countries. A high quality investment in another country may prove to be worth less because of a weak currency.

EXTENDED SETTLEMENT PRACTICES – Settlement for currency forwards takes place on the value date. Value dates for CalSTRS Currency Management Program are limited to a maximum of one year.

FLOW OF FUNDS ANALYSIS – Aggregate demand analysis involving trade balance and investment flows as it pertains to the foreign exchange market. Often driven by interest rate differentials, investors have incentives to buy into foreign markets that have higher average interest rates than their own by purchasing bonds, short-term notes, and even stocks. The resulting cross-border exchange creates increased demand for higher yielding currencies which affects foreign exchange rates.

HEDGE RATIOS – A ratio comparing the number of currency forwards sold with the size of the position in the underlying currency.

INTEREST RATE DIFFERENTIALS – A differential measuring the gap in interest rates between two similar interest-bearing assets. Traders in the foreign exchange market use interest rate differentials (IRD) when pricing forward exchange rates. Based on the interest rate parity, a trader can create an expectation of the future exchange rate between two currencies and set the premium (or discount) on the current market exchange rate futures contracts.

MSCI EAFE PLUS CANADA INDEX – The Morgan Stanley Capital International Europe, Australia & Far East Plus Canada Index. This index is a capitalization weighted index of all of the companies found in the developed country indices from Europe, Australasia, the Far East, and Canada that are in the MSCI World Index, as well.

NON-U.S. (or NON-DOLLAR) – Investments made in currencies other than the U.S. Dollar.

NOTIONAL AMOUNT – The U.S. Dollar amount of the underlying assets.

PRUDENT MANNER – A fiduciary is required to act in a manner appropriate in keeping with the investment standard, in the best interest and for the sole benefit of CalSTRS' participants and beneficiaries.

TECHNICAL ANALYSIS – A method of evaluating securities by analyzing statistics generated by market activity, such as past prices and volume. Technical analysts do not attempt to measure a security's intrinsic value. Technical analysts often use charts to identify patterns that can

suggest future activity. Technical analysts believe that historical performances of the market are indications of future performance.

VALUE DATE – Term used in relation to foreign currency to indicate the date when transferred money becomes available to the depositor.

Sources: Bloomberg, Callan Associates, Investopedia.com

G. Securities Lending Program Policy

EXECUTIVE SUMMARY

In accordance with the CalSTRS Investment Policy and Management Plan, IPMP, the California State Teachers' Retirement System Board has established a Securities Lending Program, SLP. The SLP is to be managed in a prudent manner for the sole benefit of its participants and beneficiaries in accordance with the California Constitution, the Teachers' Retirement Law and other applicable statutes. The SLP was designed to enable CalSTRS to use its existing asset base and investment expertise to generate a steady source of income. CalSTRS' size and presence in the capital markets make it a prime resource for securities lending. No investment instrument or activity prohibited by the IPMP shall be authorized for the Securities Lending Program.

This document is intended to summarize the fundamental objectives and considerations used in the investment, administration, and management of the SLP. These policies are designed to set boundaries for the structure and oversight of the management of the SLP, as well as to manage the risks associated with securities lending. CalSTRS believes that environmental, social, and governance, ESG, issues can affect the performance of our investments. As a result, the CalSTRS 21 Risk Factors have been developed as a tool that both internal and external investment managers are expected to use to assess the impact of ESG risk when making an investment on behalf of CalSTRS. Detailed procedures and guidelines for the SLP are maintained separately.

As with all other plan assets, these policies cannot be altered without explicit direction from the Board.

A flow chart (Exhibit 1) is included to provide the context for the policies within the general process of implementing the SLP. Words and terms that may be unfamiliar to the reader are referenced in the glossary.

SECURITIES LENDING PROGRAM POLICY

1. **Program Objectives:**

The strategic objective for the SLP is to assist CalSTRS in meeting its investment goals by generating incremental income through collateralized, low-risk, short-term loans using a portion of the lendable assets within the total investment portfolio. Monitoring and oversight of the implementation of the SLP shall come under the purview of the director of fixed income.

2. **Performance Objectives:**

There are no explicit goals with respect to the nominal amount of income generated by the SLP. The performance objective for the program is to achieve lending income commensurate with: 1) the market demand for the securities made available for lending and, 2) the return earned on the investment of the cash collateral within the SLP guidelines.

3. **Program Structure:**

The Securities Lending Program shall be designed to provide a balance between risk control and diversification and structured to take advantage of the benefits of both internal and external management in a prudent manner.

4. **Risk Management:**

- a. **Authorized Signers** – Authorization letters which specify who may transact business on behalf of CalSTRS shall be sent to the appropriate parties, initially at the time an account is opened, and then periodically to all Securities Lending counterparties with whom CalSTRS conducts business. Whenever a change in authorized signers occurs, the affected parties shall be notified within 24 hours in the event of termination, and as soon as possible in the event of a newly authorized signer(s).
- b. **Cash Collateral Portfolios** – Diversification within investment portfolios is critical in order to control risk and maximize returns. Minimum and maximum ranges, with respect to security types, credit exposure, and security maturity, shall be established for the Cash Collateral portfolios that are being managed both internally and externally. Such ranges shall be documented within the SLP guidelines and are subject to change as conditions warrant, as determined by the director of fixed income.
- c. **Authorization Limits** – Given that the trade activity for this program is governed by the investment and securities lending markets, no daily limits with respect to

the approval of trade activity within CalSTRS' internally managed Cash Collateral portfolio shall be established.

- d. **Trade Processing** – Prior to being released from Fixed Income, all transactions relating to the internally managed Cash Collateral portfolio shall be approved within the confines of SLP guidelines that require, at a minimum, a dual release for all fixed income trades. It should be noted that the staff person releasing the trade to the custodian must be from the Investment Operations unit, to ensure proper separation of duties.
- e. **Collateralization** – The collateral shall be marked-to-market daily in order to maintain the negotiated margin level. Given the dynamic nature of the securities lending markets, any nontraditional (traditional being defined as cash and U.S. Treasury and U.S. Agency securities denominated in U.S. dollars) collateral must be reviewed and approved by the director of fixed income.
- f. **Borrower Concentration** – Borrower diversification shall be reviewed in order to evaluate and control the borrower exposure within the SLP. Given the increasingly broad utilization of these firms throughout the SLP, this exposure is to be reviewed regularly, with CalSTRS reserving the right to exclude or limit any borrower from the SLP.
- g. **Counterparty Risk** – Each loan shall be collateralized by securities and/or cash delivered to CalSTRS' custodian/sub-custodian bank prior to or simultaneous with the release of CalSTRS' assets. To protect CalSTRS, the borrower must post collateral in the form of cash and/or other approved securities in an amount that exceeds the market value of the securities borrowed. The margin percentages shall be documented within the SLP guidelines and are subject to change as conditions warrant, as determined by the director of fixed income.

5. **Monitoring and Reporting:**

The following reports will be prepared and presented to the Board, unless otherwise stated, in order to facilitate visibility of compliance monitoring and reporting according to this document:

- a. **Securities Lending Status Report** – prepared by Operations and Fixed Income staff and presented to the chief investment officer and deputy chief investment officer (monthly)
- b. **Securities Lending Program Annual Report** – prepared by staff (annually)
- c. **Business Plan** – prepared by staff (annually)

6. **Delegation of Authority:**

The investment, administration and management of the Securities Lending Program is delegated to staff within the boundaries established by these policies and the processes described within the relevant investment guidelines.

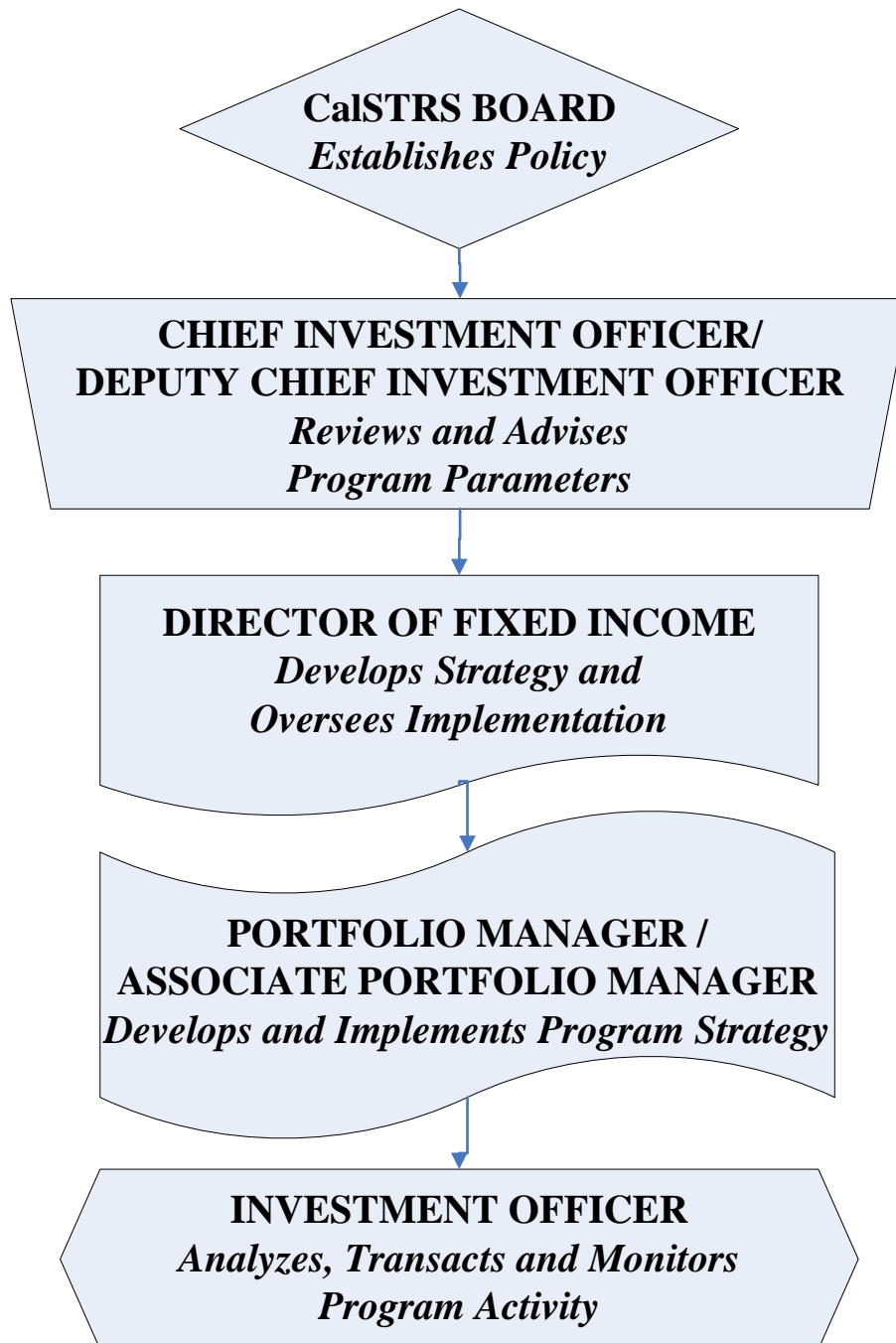
7. **Board Review:**

The Board or the Investment Committee shall administer and review these policies periodically as it deems appropriate and in keeping with its fiduciary standards.

Adopted by the Teachers' Retirement Board on February 9, 1994
Revised to combine Credit Enhancement and Currency Management with Securities Lending into "Off Balance Sheet Programs" on September 11, 1996
Revised to reflect the internal management of a portion of the cash taken as collateral on January 7, 1998
Revised to separate Credit Enhancement, Currency Management and Securities Lending into their own Policies on May 5, 1999
Revised to reflect Board review but no Policy changes on May 1, 2002
Revised to reflect new standard Policy format across the Unit on June 7, 2006
Revised to reflect Board review in keeping with the investment standard on July 12, 2012
Revised to add ESG language on April 4, 2014
Revised flowchart (Exhibit 1) to reflect APM in the hierarchy on April 5, 2017

California State Teachers' Retirement System
Securities Lending Program

PROGRAM IMPLEMENTATION FLOWCHART



GLOSSARY

AGENCY SECURITIES – Investments issued by federal corporations and federally sponsored corporations that are able to issue debt at a lower cost to such constituencies as farmers, homeowners, and students.

AGENT – An individual or organization who is authorized to act on behalf of another, called the principal.

ASSET/LIABILITY MANAGEMENT – The ability to manage the differences between your assets (which, in Securities Lending, are the securities in the cash collateral portfolio(s)) and the liabilities (which in Securities Lending are the outstanding loans).

BASIS POINT – One one-hundredth of a percent of yield; .0001 in decimal form.

BORROWER – An individual or organization who borrows securities in return for contracting into an obligation to return those securities together with a fee payment.

CASH COLLATERAL ASSET MANAGEMENT – Investment portfolio managers that are responsible for investing the cash taken as collateral from loans of securities. Each portfolio is diversified among different asset classes based on investment guidelines developed by CalSTRS and emphasizes safety of principal and adequate liquidity.

COLLATERAL – An asset, such as U.S. dollars or other liquid securities, which is pledged to a lender in the event that a loan payment cannot be met. The collateral may be appropriated from the borrower and sold in order to fulfill financial obligations.

COLLATERALIZED – A security that is secured by an asset.

COUNTERPARTY – An individual or organization on the opposite side of a loan.

CUSTODIAN – An agent, such as a broker or a bank, that stores a customer's investments for safekeeping.

LENDABLE ASSET – A security that has an established market or demand by borrowers, such as domestic and international equities and fixed income, in order to provide liquidity and facilitate investment strategies.

LENDER – An individual or organization that lends securities to a borrower.

LENDING TERMS – Specific requirements of a loan such as length of the loan, type of collateral, and rebate rate.

MARGIN LEVEL – The amount of cash or eligible securities the borrower will deposit when borrowing securities.

MARKED-TO-MARKET – An adjustment in the valuation of a security to reflect the current market values of the respective securities in the portfolio. This process is also used to ensure that margin accounts are in compliance with maintenance requirements.

NON-CORE INVESTMENT PROGRAM – A program that provides additional income to the Fund beyond the traditional asset classes within the investment office. The CalSTRS programs that fall into this category are: Credit Enhancement, Currency Hedging, Home Loan and Securities Lending.

PRINCIPAL – The major party in a transaction.

REBATE – The interest rate that the lender pays the borrower on the cash collateral.

RISK AVERSE – Investing conservatively, or avoiding risk unless adequately compensated for it.

SECURITIES LENDING – An agreement between a lender and a borrower to transfer ownership of a security temporarily in order to earn additional income. The lender retains ownership rights of the security and is entitled to any distributions that occur with respect to that security during the life of the loan, such as coupon and dividend payments. The borrower backs the agreement by delivering collateral to the lender, either in the form of cash, which is currently the dominant form of collateral in securities lending transactions, or other liquid securities, in an amount that exceeds the market value of the securities borrowed.

SHORT SELLING – The practice of selling a security that a seller does not own. Therefore, the seller must borrow the security in order to complete the transaction.

SPREAD INCOME – Difference between the yield on the investment of the cash and the interest (rebate) paid to the borrower.

UNITED STATES TREASURY SECURITIES – Debt issues of the U.S. Government, such as Treasury bills, notes and bonds.

H. Private Equity Investment Policy

EXECUTIVE SUMMARY

In accordance with the CalSTRS Investment Policy and Management Plan (“IPMP”), the California State Teachers' Retirement System Board (the “Board”), has a commitment to illiquid equity and equity related funds actively managed by specialized professionals to achieve a total rate of return superior to public equity vehicles.

The portfolio holding these assets is identified as Private Equity. CalSTRS Private Equity assets are to be invested, administered, and managed in a prudent manner for the sole benefit of its participants and beneficiaries, in accordance with the California Constitution, the California State Teachers' Retirement Law, and other applicable statutes. No investment instrument or activity prohibited by the IPMP shall be authorized for the Private Equity Portfolio. This portfolio can include limited partnerships (and other limited liability vehicles), direct investments in general partnerships, co-investments, and secondary interests in the following market segments:

- Buyout
- Venture Capital
- Debt Related
- Core Private Equity
- Private Equity Special Mandates Portfolio

The primary objective for the Private Equity Portfolio is to provide enhanced investment returns over those available in the public market. The increased risks associated with the structure, liquidity, and leverage require a higher net total rate of return.

The Board established the asset allocation and strategic objectives for the Private Equity Portfolio. The management of investments is performed by internal investment officers and monitored by the Private Equity Board Consultant. CalSTRS believes that environmental, social, and governance (ESG) issues can affect the performance of our investments. As a result, the CalSTRS 21 Risk Factors have been developed as a tool that both internal and external investment managers are expected to use to assess the impact of ESG risk when making an investment on behalf of CalSTRS. The internal investment officers operate under the direction of the Chief Investment Officer or designee. The Private Equity Board Consultant reports directly to the CalSTRS Board. As with all other plan assets, the Private Equity Investment Policy (the “Policy”) cannot be altered without explicit direction from the Board.

The Policy will establish the rules and procedures involved in the management of private equity investments. The Policy is designed to set boundaries for expected performance, diversification, and investment structure. The Private Equity Procedures are designed to provide guidelines for the implementation of the Policy.

PRIVATE EQUITY PROGRAM

The Policy is to be utilized in the management of the private equity segment of the total investment portfolio. The Policy is designed to set boundaries for the expected performance and structure. Policies approved by the CalSTRS Board cannot be altered without explicit direction from the CalSTRS Board.

1. The Private Equity Portfolio of the California State Teachers' Retirement System is invested in a prudent manner for the sole benefit of CalSTRS participants and beneficiaries in accordance with the Teachers' Retirement Law and other applicable statutes.
2. The Private Equity Portfolio shall be invested to provide enhanced investment returns. Generating high rates of return shall always be the primary objective with diversification being an ancillary benefit.

The performance benchmark for measurement periods ten years and beyond shall be the Russell 3000 Index plus three percent.

The performance benchmark for time periods less than ten years shall be the CalSTRS Custom Private Equity Index as further described in the Glossary.

In general, when reporting solely on Private Equity performance, internal rate of return (IRR) methodology is to be preferred in keeping with the CFA Institute's Global Investment Performance Standards. When reporting in conjunction with other asset classes, for the sake of consistency, portfolio and benchmark data is linked on a quarterly basis to produce time weighted returns (TWR).

The appropriateness and validity of the benchmark relative to the Private Equity Portfolio shall be assessed every three years to ensure ongoing relevance and data integrity.

3. Diversification within the Private Equity Portfolio is critical to control risk and maximize returns. The specific investments shall be aggregated, evaluated, and monitored to control unintended biases. Diversification can occur across the following parameters.
 - a. **Market Segment (Sub-Asset)** - The market segments are defined as Buyout, Venture Capital, Debt Related, Core Private Equity, and Private Equity Special Mandates Portfolio.
 - b. **Vintage Group** - Vintage group is defined by either the closing date or the date of first cash flow of the limited partnership. Investments within market segments shall be stratified by vintage group to mitigate the impact of fund flow trends within each segment.
 - c. **Economic Sector** - Economic sectors are described by the Global Industry Classification Standard (GICS).
 - d. **Geographic Location** - Geographic regions are defined as the principal focus of the investment mandate or, for a particular investment vehicle, the domicile of the

underlying portfolio companies. The geographic breakdown shall be segregated by United States, Developed Markets Non-United States, and Non-Developed Markets.

Investments shall not be approved for the sole purpose of aligning one specific diversification range. Projected rate of return, risk, and other policies shall receive consideration in addition to diversification.

4. A strategic target and range shall be established for each of the Market Segments. The target and range may change over time as conditions warrant as approved by the Investment Committee. The target and range parameters are included as Exhibit 1. The diversification criteria will be reviewed on an annual basis.
5. Investment restrictions included in the IPMP are hereby incorporated by reference.
6. Authorization letters which indicate who may sign on behalf of CalSTRS shall be included at the time of closing. Whenever a change in authorized signers take place, the limited partnerships shall be notified in writing within 24 hours in the event of termination, and as soon as possible in the event of a newly authorized signer(s).
7. Prior to being processed by the Operations area, all disbursements shall be signed by two authorized signers.
8. Graduated limitations of non-cumulative daily signing authority for private equity disbursements are as follows:

Investment Officer I	\$ 15 million
Investment Officer II	\$ 50 million
Investment Officer III	\$ 70 million
Associate Portfolio Manager	\$ 85 million
Portfolio Manager	\$100 million
Director of Private Equity	\$400 million
Deputy Chief Investment Officer	\$ 1.5 billion
Chief Investment Officer	\$ 1.5 billion
9. The Private Equity Portfolio will be managed according to an annual business plan whose main business components will encompass an analysis of the investment environment, a review of the investment strategy, a review of the diversification targets, and a resource allocation budget.
10. The Private Equity Board Consultant will prepare and present portfolio management reports on a semi-annual basis. The management report will provide information on, among other items, portfolio diversification, largest holdings, investment performance, co-investment holdings, and committed and funded status.
11. The rejection decision for limited partnerships, direct investments, co-investments, and secondary interests is delegated to staff, with the stipulation that all investment

opportunities receive equal opportunity and are subject to the appropriate amount of due diligence as defined in the Private Equity Procedures.

12. Risks resulting from foreign currency exposure shall be managed at the overall CalSTRS Fund level. Where appropriate, gain or loss attributable to foreign currency exchange rate movement will be reported as a separate line item in Private Equity's portfolio and performance reporting.
13. The Policy covers the purchase, sale, and transfer of limited partnership interests, secondary interests, co-investments, portfolio companies, separately managed accounts, and direct investments in a General Partnership or in the management companies of General Partnerships. The subject investments may be in private or public vehicles and securities.

LIMITED PARTNERSHIP INVESTMENTS

14. The approval decision under delegation as it relates to Limited Partnerships, shall be completed following a positive written recommendation by CalSTRS Staff and either 1) the Program Advisor, or 2) an Independent Fiduciary.
15. The approval decision for Follow-On Limited Partnerships is delegated to staff considering the following stipulations:
 - a. Applicable only to limited partnerships sponsored by general partner(s) included in the CalSTRS Private Equity Portfolio.
 - b. Due diligence process shall be consistent and appropriate as defined in the Private Equity Procedures Manual.
 - c. Maximum amount of the commitment shall not exceed \$750 million or 25 percent of the total amount of the partnership capitalization, whichever is less.
 - d. A final report will be presented to the Investment Committee as soon as practical after the commitment is completed.
16. The approval decision for New Limited Partnerships is delegated to staff considering the following stipulations:
 - a. Due diligence process shall be consistent and appropriate as defined in the Private Equity Procedures Manual.
 - b. Maximum amount of the commitment shall not exceed \$400 million or 25 percent of the total amount of the partnership capitalization, whichever is less.
 - c. A final report will be presented to the Investment Committee as soon as practical after the commitment is completed.

SECONDARY MARKET TRANSACTIONS

17. Secondary Market Transactions are purchases or sales of Private Equity related asset pools. Such asset pools may be diversified (greater than three assets in a single transaction) or non-diversified (less than three assets in a single transaction). A diversified transaction shall not include any single asset greater than allowed under non-diversified.
18. Private Equity related asset pools can take the form of: 1) Limited Partnership interests, 2) Co-investments, 3) General Partner interests, 4) Separately Managed Accounts, 5) Portfolio Companies, or a combination of the above.
19. The approval decision under delegation, as it relates to a Secondary Market Transactions shall be completed following a positive written recommendation by CalSTRS Staff and either 1) the Program Advisor, or 2) an Independent Fiduciary.
20. The approval decision for a Secondary Market Transaction is delegated to staff considering the following stipulations:

- a. Due diligence process shall be consistent and appropriate as defined in the Private Equity Procedures Manual.
- b. The Maximum amount of the commitment shall not exceed:

Asset Type	Diversified	Non-diversified
Limited Partnership interests and Separately Managed Accounts	\$1.5 billion	\$750 million
Co-investments, General Partner interests, and Portfolio Companies	\$500 million	\$250 million

- c. A final report will be presented to the Investment Committee as soon as practical after the commitment is completed.
- d. Secondary Market Transactions involving Co-Investments or Portfolio Companies shall only be transacted (directly or indirectly) with an existing CalSTRS General Partner. Sales of Co-Investments and Portfolio Companies may be transacted independently of a General Partner.
- e. For the avoidance of doubt, diversified and non-diversified is not defined by the structure of the investment (e.g. partnership, separately managed account, co-investment), but rather by the underlying assets.

CO-INVESTMENTS, DIRECT INVESTMENTS IN GENERAL PARTNERSHIPS AND SEPARATELY MANAGED ACCOUNTS

21. The approval decision under delegation as it relates to co-investments, and direct investments in General Partnerships and General Partnership management companies, and separately managed accounts shall be completed following a positive written recommendation by the CalSTRS Staff and either 1) the Program Advisor, 2) an Independent Fiduciary, or 3) a Co-Investment Advisor.
22. The approval decision for co-investments is delegated to staff considering the following stipulations:
 - a. Co-investments shall be made on the same (or better) terms and conditions as provided to the Limited Partnership that is investing in the same transaction.
 - b. Due diligence process shall be consistent and appropriate as defined in the Private Equity Procedures Manual.
 - c. Maximum amount of each co-investment commitment shall not exceed the smallest of 1) \$250 million, 2) 10 percent of the size of the Limited Partnership investing in the transaction, or 3) 100 percent of the Limited Partnership's investment in the transaction.
 - d. Co-investments shall be made alongside an existing CalSTRS General Partner, provided the strategy and objectives of the Limited Partnership investing in the transaction are consistent with those of the Limited Partnership in which CalSTRS has a commitment.
 - e. A final report will be presented to the Investment Committee as soon as practical after the commitment is completed.
 - f. CalSTRS may incur due diligence costs and expenses on potential co-investments. As described in the Private Equity Procedures Manual, co-investment diligence costs and expenses will be approved in advance by the Director of Private Equity or the Chief Investment Officer.
23. The approval decision for direct investments in General Partnerships and the management companies of General Partnerships is delegated to staff considering the following stipulations:
 - a. Due diligence process shall be consistent and appropriate as defined in the Private Equity Procedures Manual,
 - b. Maximum amount of each commitment shall not exceed \$250 million.
 - c. Ownership percentage of the direct investment in any one General Partnership (or series of General Partnerships organized by a particular manager) shall not exceed 25 percent economic interest.
 - d. A final report will be presented to the Investment Committee as soon as practical after the commitment is completed.

24. The approval decision for investments in Separately Managed Accounts is delegated to staff considering the following stipulations:
- a. Due diligence process shall be consistent and appropriate as defined in the Private Equity Procedures Manual.
 - b. Maximum amount of commitment shall not exceed \$750 million for a Follow-On Separately Managed Account vehicle or \$400 million for a New Separately Managed Account vehicle.
 - c. The Separately Managed Account vehicle must be a limited partnership, or limited liability corporation, or other vehicle that provides CalSTRS protection from general partner liability.
 - d. A final report will be presented to the Investment Committee as soon as practical after the commitment is completed.

SPECIAL MANDATE - PROACTIVE PORTFOLIO

Within Private Equity, there is a Proactive Portfolio, which provides a framework for selecting private equity investments in an opportunistic and disciplined manner which focuses on unique opportunities and innovative strategies. These programs include:

- a. The Urban and Rural Program started in 2001, which seeks investments consistent with the Board's Policy on California Investments in the emerging space.
- b. The New and Next Generation Program started in 2003, which seeks to capture innovative strategies (i.e., new market opportunities and/or new drivers of value creation due to changing demographics, etc.)
- c. Additional strategies may be added to the portfolio at the direction of the Investment Committee.

General: Given the unique nature of the Proactive strategies, CalSTRS will use Fund-of-Funds (FOF) managers that specialize within each segment of these unique and innovative areas to lead the investment program. Staff may expand the program to invest in limited partnerships or co-investments that have been approved and included in the FOF Portfolio (side by side with the fund-of-funds). Since these innovative Proactive investments carry different risks than traditional mainstream funds, a Specialized Advisor may be selected from a pool of approved specialized advisors, in addition to the FOF manager or Independent Fiduciary. All investment analyses and due diligence will be conducted in the same manner as previously reviewed by the Investment Committee. All side by side investments shall be completed following a positive written recommendation by CalSTRS Staff and either 1) the Program Advisor, 2) an Independent Fiduciary, or 3) a Specialized Advisor.

25. **Fund-of-Funds:** The approval decision under delegation as it relates to new Proactive Portfolio Fund-of-Funds investments is delegated to staff considering the following stipulations:
 - a. Due diligence process shall be consistent and appropriate as defined in the Private Equity Procedures Manual.
 - b. Maximum amount of the commitment for a FOF new to CalSTRS or with a new strategy shall not exceed \$100 million.
 - c. Maximum amount of the commitment for a follow-on investment with a FOF manager shall not exceed \$250 million.
 - d. A final report will be presented to the Investment Committee as soon as practical after the commitment is completed.
26. **New Co-Investment/FOF Side-by-Side Investment:** The approval decision for new co-investments or investment in a limited partnership that is side-by-side with a FOF is delegated to staff considering the following stipulations:

- a. Co-investments/side-by-side investments shall be made on the same (or better) terms and conditions as provided to the partnership.
- b. Due diligence process shall be consistent and appropriate as defined in the Private Equity Procedures Manual.
- c. Maximum amount of each commitment shall not exceed \$55 million or 30 percent of the CalSTRS total commitment to that partnership, whichever is less.
- d. A final report will be presented to the Investment Committee as soon as practical after the commitment is completed.
- e. Co-investments/side-by-side within the Proactive Portfolio is limited to fund investing in the United States, Canada, Mexico and Puerto Rico. (The business activities of the co-investment must be primarily in the United States.)

27. **Follow-On Co-Investment/FOF Side-by-Side Investment:** The approval decision for follow-on investment in a limited partnership within the Proactive Portfolio is delegated to staff considering the following stipulations:

- a. Due diligence process shall be consistent and appropriate as defined in the Private Equity Procedures Manual.
- b. Maximum amount of the commitment shall not exceed \$100 million or 30 percent of the total amount of the partnership capitalization, whichever is less.
- c. A final report will be presented to the Investment Committee as soon as practical after the commitment is completed.
- d. Co-investments/side-by-side within the Proactive Portfolio is limited to fund investing in the United States, Canada, Mexico, and Puerto Rico. (The business activities of the co-investment must be primarily in the United States.)

Adopted June 1998

Revised July 1998

Revised April 1999

Revised to increase flexibility regarding secondary transactions on April 2001

Revised March 2002

Revised for clarification of returns calculations using dollar-weighted IRR on June 2003

Revised to expand eligible regions to rest of world on June 2004

Revised to change level of delegated authority on July 2005

Revised to increase co-investment limits and layout proactive portfolio process on June 2006

Revised to adjust Benchmark on May 2007

Revised for co-investments ROW, sale policy and direct GP Investment on July 13, 2007

Revised for daily trading authority limits, and sector targets and ranges on November 1, 2007

Revision of financial benchmark July 10, 2008

Revision for separately managed accounts on July 12, 2012

Revised to add ESG Risks Policy reference on September 10, 2013

Revised to clarify the benchmark for different time periods, July 11, 2014

Revised to define APM and DCIO trading limits on April 5, 2017

Revised to customize GXPEI benchmark and establish new sub-assets on June 7, 2017

Revised to update and reflect increased limits, investment types, and structures, November 1, 2017

Private Equity Sub-Asset	Approved Ranges	Interim Targets	Approved Long-Term Targets
Buyout	60 - 85%	66%	69%
Venture Capital	0 - 15%	10%	7%
Debt Related	5 - 20%	15%	15%
Core Private Equity	0 - 5%	2%	5%
Private Equity Special Mandates Portfolio	0 - 5%	7%	4%
Total		100%	100%

Geographic Region	Approved Ranges	Approved Targets
United States	65 - 85%	75%
Developed Markets Non-United States	15 - 35%	20%
Non-Developed Markets	0 - 15%	5%
Total		100%

- Interim Targets represents Sub-Asset allocation goals, generally, expected to be achieved in the next 12 to 36 months. These shall be reviewed and updated at least annually and communicated to the CalSTRS Investment Committee.
- The Approved Long-Term Targets represents goals to be achieved over periods, generally, equal to or longer than five years.

GLOSSARY

ADVISORY BOARD – Advisory Boards play a role in the governance issues relating to the fundamental aspects of the Partnership, such as decisions on valuations and management of conflicts of interest. Generally, a majority of the composition of the Advisory Board is comprised of the largest limited partners in the limited partnership.

AGGREGATION OF PROFITS AND LOSSES – Aggregation of profit and losses ensures a fairer profit sharing between the general partner and the limited partners. This calculation is based on the entire performance of the portfolio rather than on a deal by deal basis.

BUYOUTS – See Leveraged Buyouts.

CALSTRS CUSTOM PRIVATE EQUITY INDEX – Weighted blend of underlying sub-asset benchmarks as follows:

- Buyouts: The Buyout portion of the State Street GXPEI customized to reflect the pacing of CalSTRS buyout commitments.
- Venture Capital: The venture capital portion of the State Street GXPEI customized to reflect the pacing of CalSTRS venture capital commitments.
- Debt Related: The debt related portion of the State Street GXPEI customized to reflect the pacing of the CalSTRS debt related commitments.
- Core Private Equity: The buyout portion of the State Street GXPEI customized to reflect the pacing of CalSTRS core private equity commitments.
- Private Equity Special Mandates Portfolio: Weighted blend of the buyouts, venture capital, and debt related portions of the State Street GXPEI customized to reflect the pacing of CalSTRS special mandates commitments.

The Sub-Asset components of the benchmark shall be weighted according to the interim Sub-Asset allocation targets. The Vintage Year customization shall be weighted according to actual Vintage Year deployments. Customization will employ a “scaled cash flow” methodology consistent with industry best practices.

CARRIED INTEREST –The general partner’s carried interest is its share of the partnership’s profits, and generally ranges from 10 percent to 30 percent of the total. A 20 percent carried interest is the industry norm for private equity.

CO-INVESTMENT – Privately negotiated purchase of equity or quasi-equity from private or publicly traded entities. Such investments involve the purchase of non-registered securities, which by their private, illiquid nature command a premium over comparable publicly traded securities.

CO-INVESTMENT ADVISOR – A co-investment advisor is an investment manager who manages a Separately Managed Account of co-investments on behalf of CalSTRS. Such an advisor may act as an Independent Fiduciary for co-investments that are outside of the Separately

Managed Account if at least \$25 million is invested in such transaction through the Separately Managed Account that is being managed on behalf of CalSTRS by such Co-investment Advisor.

CO-INVESTMENT TRANSACTION – A financing or series of financings that have an initial close on a given date and a final close no later than 365 days thereafter. Subsequent to the initial close, financings must have essentially the same terms or better to be considered a single transaction.

CONVERTIBLE PREFERRED STOCK – A class of stock having different rights than Common Stock, including a liquidation preference over Common Stock; and allowing the Preferred Shareholder to convert Preferred shares into Common shares at some specified conversion ratio. Conversion typically occurs in conjunction with an initial public offering, providing a means of liquidation for the Preferred Shareholder.

CORE PRIVATE EQUITY – Private equity investments that are expected to have lower risk and reward profiles than traditional private equity investments. Such investments will likely be held for longer periods of time than traditional private equity investments. Management fees and carried interest will generally be lower than for traditional private equity investments.

DIRECT INVESTMENTS – Direct Investments are those made outside of a limited partnership structure. While a co-investment is made alongside of a limited partnership investment, a direct investment is not. Direct investments need a greater level of due diligence and involve a greater level of risk in comparison to a co-investment.

DEBT RELATED INVESTMENT STRATEGIES – Debt related investments include subordinated debt and distressed debt investment strategies. Subordinated debt is often used to help finance leveraged buyouts or other similar transactions. Subordinated debt typically takes the form of mezzanine securities, junk bonds, convertible preferred stock, and other high yielding debt oriented securities. Although considered debt-oriented, securities at the subordinated debt or mezzanine level typically possess equity conversion features, rights, and warrants. Investors at the subordinated debt level are junior to the senior debt holders in a leveraged buyout transaction, meaning they receive interest payments after the senior debt has been satisfied and they share in liquidation after the senior paper holders have made their claims. However, subordinated debt holders are senior to the common equity holders of the company.

Distressed debt investments are a form of recovery investing that focus on the debt of a distressed company. Distressed debt investing is defined as the investment in debt securities (generally senior-secured debt) of troubled or bankrupt companies. Also see Restructuring/Recovery investments.

DEVELOPED MARKETS – Countries with advanced economies and capital markets as designated by Dow Jones or Standard & Poor's.

DISTRESSED DEBT – See Debt Related Investment Strategies

DISTRIBUTIONS – Cash and/or securities paid out to the limited partners from the limited partnership.

FIRST TIME LIMITED PARTNERSHIPS – A fund from a management team that has not previously been in CalSTRS’ Private Equity Portfolio.

FOLLOW-ON LIMITED PARTNERSHIPS – The second and all subsequent funds raised by a management team that are included in CalSTRS’ Private Equity Portfolio.

GENERAL PARTNER – Managing partner of a limited partnership responsible for performing the day-to-day administrative operations of the partnership and acting as investment advisor to the partnership.

GLOBAL INDUSTRY CLASSIFICATION STANDARD (GICS) – Industry taxonomy developed in 1999 by MSCI and Standard & Poor's (S&P) for use by the global financial community.

GXPEI (OR THE STATE STREET GX PRIVATE EQUITY INDEX) – A peer-based private equity index developed, owned and managed by State Street. The data for this index is derived from the cash flow data of State Street’s limited partner clients.

HURDLE RATE – A rate of return that must be met before the General Partner can share in the carried interest.

INDEPENDENT FIDUCIARY – A third party organization that provides non-discretionary specialized advisory services to Staff and acts as a fiduciary to CalSTRS and who by law must act in the best interests of CalSTRS and put the interests of CalSTRS above their own.

INITIAL PUBLIC OFFERING (IPO) – The sale or distribution of a stock or a portfolio company to the public for the first time.

INTERNAL RATE OF RETURN (IRR) – The discount rate at which the present value of future cash flows of an investment equals the cost of the investment. It is determined when the net present value of the cash outflows (the cost of the investment) and the cash inflows (returns on the investment) equal zero, the rate of discount being used is the IRR.

INTERNATIONAL BUYOUT – An international buyout fund is a limited partnership that generally focuses on acquisition, equity expansion, or later stage investment strategies; however, the fund’s primary geographic focus is outside of the United States.

J-CURVE – The J-Curve phenomenon is the effect of the cash flow behavior of a partnership. It can be summarized as the first year’s investment expenses of investing in a fund that has yet to harvest its capital gains in the future. This normally translates into a negative IRR in the early years of the fund. The plot of the partnership values versus time generally resembles a “J.”

JUST IN TIME CAPITAL CALL – The practice is to take capital calls as needed on a transaction per transaction basis.

KEY MAN PROVISION – Limited partners are demanding the right to suspend the funding of the partnership if some of the key people were to leave the firm. This provision is designed to

assure the continuity of the firm, and to assure that success (if related to various individuals) stays within the firm.

LEVERAGED BUYOUTS – Leveraged Buyouts involve the purchase of all or part of the stock or assets of a company utilizing a significant amount of borrowed capital as well as equity capital. Borrowed capital typically consists of some combination of senior and subordinated debt. The company may be privately or publicly owned, or a subsidiary or division of a privately or publicly owned company.

LIMITED PARTNER – The investors in a limited partnership, generally providing 99 percent of the capital and receiving 80 percent of the profits. Limited partners do not participate in the management of the partnership's activities. However, they normally have the right to vote to approve or disapprove amendments made to the limited partnership agreement.

LIMITED PARTNERSHIP – Organization made up of a General Partner, who manages the operations, and limited partners, who invest capital but have limited liability. Limited partners are not involved in the day-to-day management of the partnership and generally cannot lose more than their capital contribution.

LOOKBACK PROVISION – The lookback provision guarantees that the stated profit allocation is met at the end of the partnership's term with respect to the limited partners.

MANAGEMENT FEES – The management fee is designed to compensate the general partner. This fee is used to provide the partnership with such resources as investment and clerical personnel, office space, and administrative services required by the partnership. Generally, the fee ranges from 1.25 percent to 2.5 percent of capital commitments.

MEZZANINE (ALSO SEE SUBORDINATED DEBT) – Mezzanine investments are in unsecured or junior obligations in financing. They typically earn a current coupon or dividend and may have warrants on common stocks or conversion features to enhance returns.

MULTIPLE OF MONEY – Multiple of money is often used to measure performance. This is a cumulative return, identifying the return on an investment over its life. A multiple that is greater than one indicates that the investment's total value exceeds the amount of capital contributed to date, whereas, a multiple less than one indicates that the investment's total value is less than the amount of capital contributed.

NEW LIMITED PARTNERSHIPS – Funds that are managed by general partners that are new to the CalSTRS Private Equity Portfolio.

NEW & NEXT GENERATION PARTNERSHIPS – The New & Next Generation Program was established by the Investment Committee in 2003. It involves partnerships that are raising their first-, second-, and third-time institutional funds or partnerships formed by junior or senior level partners that have left a prior partnership to form a new general partner.

NON-DEVELOPED MARKETS – Countries with developing economies and capital markets as designated by Dow Jones or Standard & Poor's.

PARTNERSHIP EXPENSES – Expenses borne by the partnership including costs associated with the organization of the partnership, the purchase, holding, or sale of securities, and legal and auditing expenses.

PARTNERSHIP TERM – The term of the partnership is normally ten years, with the general partner reserving the right to terminate the partnership early or extend the term for a set period of time. This is generally subject to the approval by the limited partners.

PORTFOLIO COMPANIES – Portfolio companies are any of the companies in which the Limited Partnership has an investment. Investments in Portfolio Companies shall only be contemplated or executed as part of a Secondary Market Transaction and only with an existing CalSTRS General Partner. An investment in a Portfolio Company shall never result in CalSTRS having a majority economic or voting interest in such company.

PRIVATE EQUITY BOARD CONSULTANT – A Private Equity Board Consultant acts as an independent fiduciary advisor to the Investment Committee and provides expertise and advice related to the overall investment strategy, policies, and practices of the Private Equity Program.

PRIVATE EQUITY SPECIAL MANDATES – Discrete private equity investment strategies (other than divestments which are covered by a separate Board policy) suggested by the CalSTRS Investment Committee that include, but are not limited to environmental, social, governance (ESG) matters in-State investments, or other factors that are expected to have a positive or neutral impact on the economic performance of the fund over the long term. See Special Mandate Policy in the IPMP.

PROACTIVE PORTFOLIO – Proactive Portfolio currently encompasses two Private Equity Special Mandates: (1) the Underserved Mandate investing with private equity managers specializing in underserved urban and rural markets and (2) the New and Next Generation Mandate investing in private equity managers that are of a “new and next generation” nature.

PROGRAM ADVISOR –A Program Advisor provides expertise, advice and recommendations to support staff in the management and monitoring of an asset class or classes including, but not limited to, screening the universe of general investment opportunities and identifying those meeting CalSTRS’ selection criteria, assisting staff in performing due diligence on prospective investment opportunities, issuing investment recommendations, and maintaining a deal log of investment opportunities. A Program Advisor is also an Independent Fiduciary.

RESTRUCTURING/RECOVERY INVESTMENTS – Recovery investments involve the investment of capital in companies experiencing anywhere from relatively minor, to extreme difficulties, to companies involved in bankruptcy proceedings. Recovery investing takes advantage of discounted securities of unhealthy, bankrupt (or near); under-performing, and/or under-capitalized companies and either ride or steer them back to recovery. To accomplish this goal, the various funds available use a variety of strategies. The strategies vary by the activity level and/or degree of control required by the acquirers, types of securities utilized, and the relative health of the target companies sought (from bankrupt to nearly healthy). Also, like buyout and venture capital managers, managers of ailing company funds each have a particular

target company size preference and some have industry or sector preferences.

Distressed debt investments are a form of recovery investing that focus on the debt of a distressed company. Distressed debt investing is defined as the investment in debt securities (generally senior-secured debt) of troubled or bankrupt companies. Also see Debt Related Investment Strategies.

SECONDARY LIMITED PARTNERSHIP INTERESTS – Privately negotiated purchase of Limited Partnership interests or Portfolio Company interests.

SEPARATELY MANAGED ACCOUNT – An investment vehicle managed for one investor rather than many. The vehicle may have a specialized mandate or may invest alongside a Limited Partnership.

SPECIAL SITUATIONS – Special Situation funds represents a “catchall” for non-traditional investments that do not fit either of the above groupings. These will include minority, but often control positions in public companies, “white knight” efforts to support management’s to achieve long-term objectives, turnarounds and bankruptcy reorganizations, and other special situation profit opportunities. It is not the intention to invest in “unfriendly” business take-overs.

SUBORDINATED DEBT – See Debt Related investment strategies.

URBAN AND RURAL PROGRAM – The Urban and Rural program was established by the Investment Committee in 2001 to seek private equity investment in the inner city and underserved portions of California and the U.S.

VENTURE CAPITAL – Venture capital refers to investments in young, emerging growth companies in different stages of development. The stages of venture capital investing include the following:

SEED STAGE -- an entrepreneur seeking capital to conduct research or finish a business plan;

EARLY STAGE -- a company developing products and seeking capital to commence manufacturing;

LATE STAGE -- a profitable or near-profitable high growth company seeking further expansion capital. The common theme underlying all venture capital investments is the high-growth nature of the industries in which the investee companies operate and the active role played by the investor to identify additional management expertise and provide general business advice.

VINTAGE YEAR – Vintage Year can be defined in two ways: 1) For the purpose of investment pacing, a vintage year is the calendar year for which a fund commitment is closed; or 2) For the purpose of benchmarking, a vintage year is the calendar year an investment first draws capital. By placing an investment into a particular vintage year, the investor can compare the performance of a given investment with other similar investments that have first drawn capital

during that calendar year.

I. Credit Enhancement Program Policy

INTRODUCTION

In accordance with the decision by the California State Teachers' Retirement System (CalSTRS) to pursue the development of a Credit Enhancement Program, CalSTRS has established an ongoing program that emphasizes earning fee income through the enhancement of bond transactions.

Credit Enhancement is an off-balance sheet activity that does not affect the CalSTRS asset allocation. The primary objective of the program is to earn fee income. The bond transactions are either governmental or private activity, which have a public purpose (e.g. multi-family housing, industrial development, pollution control). The credit enhancement opportunity set is considered low risk.

Internal professionals, who operate under the direction of the Chief Investment Officer, or designee, perform the management of the credit enhancement activities.

This manual will establish the policies involved in the management of the Credit Enhancement Program. The policies are designed to set boundaries for expected performance, diversification, and investment structure. The procedures are designed to provide guidelines for the implementation of the approved policies.

WHAT IS CREDIT ENHANCEMENT?

Credit enhancement is an agreement by CalSTRS to provide for the payment of principal and interest in the event that the primary obligor does not meet the terms and conditions of the bond indenture. This substitution (for a fee) allows the public or private entity borrowing access to the capital markets and permits them to pay a lower interest rate to investors. The most utilized form of credit enhancement is a letter of credit. Another form of credit enhancement used by the CalSTRS Credit Enhancement Program is called a liquidity enhancement. Liquidity enhancement is used for short term or variable rate securities to give investors confidence for liquidity associated with a specific security. Most liquidity enhancements contain a lesser degree of credit exposure than letters of credit.

The Credit Enhancement Program is an off-balance sheet program since it is a commitment to pay investors in circumstances that are expected to be highly infrequent. The strategic asset allocation plan is not affected.

FORMS OF CREDIT ENHANCEMENT

- Liquidity Support
- Credit Support
- Combination of Liquidity and Credit Support

CREDIT ENHANCEMENT INSTRUMENTS

Credit enhancement transactions normally utilize financial instruments known as letters of credit (LOC). A LOC is an unconditional promise to make payments up to a stated amount for a specified period upon receipt of a proper notice. The commitment is irrevocable. The following are the type of LOCs that CalSTRS utilizes:

Confirming Letter of Credit

A bank issues a fronting letter of credit and CalSTRS issues a confirming letter of credit. For this LOC, the investor (through the trustee) looks to the bank supporting the obligor to make the interest and principal payments to investors. If the bank fails to make these payments, the trustee calls upon CalSTRS to make the payment. CalSTRS would then demand reimbursement from the bank.

Direct Pay Letter of Credit

The Direct Pay LOC Bank (CalSTRS) issues a fronting letter of credit and a bank issues a standby letter of credit. For this letter of credit, the investor (through the trustee) looks to the Direct Pay LOC Bank for all interest and principal payments to investors. The obligor (company or municipality seeking credit) then reimburses the Direct Pay LOC Bank. If the obligor fails to reimburse for the LOC drawing, the standby bank reimburses CalSTRS.

Letter of Credit

An instrument issued by a bank or pension plan that unconditionally promises to make debt service payments and provide liquidity support on a bond issue up to a stated amount for a specified period of time upon receipt of proper notice in the event of a default. Letters of credit are usually required for variable rate bond issues.

Line of Credit/Liquidity Facility

This form of LOC is an availability to purchase securities under specific situations. The bonds or commercial paper that this facility supports may be remarketed on a daily, weekly, or monthly basis. There is a need to have their marketability guaranteed. If there is a failed remarketing, CalSTRS may be required to “purchase” these bonds and receive pre-agreed interest payments. In the case of commercial paper, this commitment may be revocable under certain circumstances.

CREDIT ENHANCEMENT PROGRAM POLICIES

A credit enhancement is the substitution of a public or private entity’s credit standing with that of a financial institution that has a higher credit rating. It is an agreement by a third party to pay the investor any scheduled interest and/or principal payments in the event the primary obligor does not pay. This substitution (for a fee) allows the public or private entity access to the capital markets and permits them to pay a lower interest rate to investors. The most utilized form of credit enhancement is a letter of credit. Another form of credit enhancement used in the CalSTRS Credit Enhancement Program is called a liquidity enhancement. Liquidity enhancement is used for short term or variable interest rate securities to give investors confidence for liquidity associated with a specific security. Most liquidity enhancements contain a lesser degree of credit exposure than letters of credit.

The following represent the approved policies to be utilized in the management of the Credit Enhancement Program. The policies are designed to set boundaries for the expected performance and structure. Policies approved by the CalSTRS Board cannot be altered without explicit direction from the CalSTRS Board.

1. The Credit Enhancement Program of the California State Teachers' Retirement System is invested in a prudent manner for the sole benefit of CalSTRS' participants and beneficiaries in accordance with California State Law.
2. The primary objective of the Credit Enhancement program is to provide fee income through the enhancement of low risk bond transactions for either governmental entities or private activities that serve a public interest (e.g., multifamily housing, industrial development, pollution control).
3. The structure of the transaction is a primary form of risk management. However, diversification by municipal finance sectors is important to control risk. These transactions are considered low risk and frequently have structural protections that are the primary form of risk control.
4. Credit enhancement is considered a selective investment activity. The maximum amount of outstanding commitments enhanced under the Credit Enhancement Program is limited to three percent (3%) of the market value of the CalSTRS Investment Portfolio.
5. No investment vehicle or activity prohibited by the Investment Resolution adopted by the Board in 1984, as amended from time to time will be authorized for the Credit Enhancement Program.
6. Authorization letters, which indicate who may sign on behalf of CalSTRS, shall be included at the time of the closing of a transaction.
7. Prior to being processed by the Operations Area, all wire transfers and bond purchases shall be signed by two Investment Officers.
8. Graduated limitations of daily authority to wire transfer funds or purchase bonds under specific situations are as follows:

Investment Officer I	\$ 50 Million
Investment Officer II	\$ 75 Million
Investment Officer III	\$ 100 Million
Portfolio Manager	\$ 300 Million
Director of Private Equity	\$ 400 Million
Chief Investment Officer	\$ 600 Million
9. The Credit Enhancement Program will be managed according to an annual business plan whose main business components will encompass an assessment of the credit enhancement market, a review of the portfolio, a review of the strategy, a review of targets, and a resource allocation budget.

10. The Credit Enhancement Program will report on a monthly basis: a) new transactions, b) summary of existing transactions broken down by structure, and c) financial institution risk.
11. The rejection decision for a credit enhancement transaction is delegated to staff, with the stipulation that all investment opportunities receive equal opportunity and subject to the appropriate amount of due diligence as defined in the credit enhancement procedures.
12. The approval decision for up to \$400 million, per transaction, is delegated to staff as it relates to the Credit Enhancement Program. Each transaction shall have a written positive recommendation by the CalSTRS staff and Chief Investment Officer.
13. The approval decision for the Credit Enhancement Program is delegated to staff considering the following stipulations:
 - a. All credit enhancement and liquidity enhancement transactions must be for projects that are located in the United States, territories, or the District of Columbia.
 - b. All credit enhancement and liquidity enhancement transactions must be completed in conjunction with a third party external to CalSTRS. This “partnership” with another financial institution is designed to help ensure that the private market discipline is present in all transactions.
 - c. The amount of risk associated with each transaction will be limited to the amount of the total credit risk as defined below, subject to limitations in 13C- 4:
 1. 50% of the pro-rata direct risk transaction which is shared with a partner financial institution; this limit is net of participations. For example, CalSTRS may underwrite up to 100% of the risk and participate out (sell down) to another financial institution, so that CalSTRS’ net hold does not exceed 50% of the transaction, or
 2. 100% of a credit enhanced transaction in the form a letter of credit supporting a project that has another financial institution taking the direct credit risk, or
 3. 100% of the liquidity risk in a transaction that is enhanced by a bond insurer.
 4. 25% of transactions involving employing agencies such as the California public schools, public colleges and universities, or California Agencies and Departments.
 - d. All financial partners, as identified in policy 13C, must have an investment grade credit rating by a recognized credit rating agency (such as Moody’s, S&P, Fitch or Thomson BankWatch) or equivalent credit rating documented by the CalSTRS Staff.

- e. To the extent possible, all fees charged, credit terms, legal conditions and project structures for credit and liquidity transactions should reflect current market conditions at the time of the transaction.
- f. Diversification by geography, industry sector and transaction type is desired. The following types of transactions may be financed under the program (the list is not exhaustive):
 - 1. Private activity bonds such as industrial development bonds, pollution control bonds, and multi-family housing,
 - 2. Public and private non-profit entities providing a public good or service,
 - 3. Tax and revenue anticipation notes and commercial paper,
 - 4. City, special district and other governmental financing.

Policies and procedures adopted in February, 1994
Revised to reflect legislation regarding employer-related transactions in April, 1999
Revised to increase portfolio size to 3% of CalSTRS Investment Portfolio on December 4, 2000
Revised to expand geographic market from contiguous states to national on June 1, 2005
Revised to eliminate ranges for geographic market on July 13, 2007
Revised to increase limits on daily trading authority on July 10, 2008

GLOSSARY OF TERMS

BOND INDENTURE: An agreement between an issuer of bonds and a trustee, on behalf of the bondholders, setting forth the terms of the bonds.

BOND INSURANCE: Noncancellable insurance purchased by the issuer from a monoline bond insurer pursuant to which the insurer promises to make scheduled payments of interest and principal on a bond issue if the issuer/obligor fails to make timely payments. When the bond issue is insured, the investor relies upon the creditworthiness of the insurer rather than the issuer.

COLLATERALIZED LETTER OF CREDIT: A letter of credit issued by a fronting bank, which has pledged AAA-rated collateral to CalSTRS, in order for CalSTRS to issue a confirming letter of credit. CalSTRS is the beneficiary of the pledged collateral. This structure is typically used when the fronting bank has a low credit rating or no credit rating.

COMMERCIAL PAPER: Short term debt obligations commonly maturing in 270 days or less.

CONFIRMING LETTER OF CREDIT: A letter of credit issued by CalSTRS that confirms a fronting bank's letter of credit. The CalSTRS confirming letter of credit is drawn upon in the event the fronting bank fails to pay upon a draw. CalSTRS is in the second loss position. The credit rating of the bond issue is based on CalSTRS' rating.

CREDIT ENHANCER: A financial institution, such as a bank, or a pension plan, such as CalSTRS, that provides credit enhancement by issuing a letter of credit, which guarantees to investors that principal and interest payments will be made as scheduled, or a line of credit which provides liquidity support for the bond issue. When the bond issue is credit enhanced, the investor relies upon the creditworthiness of the credit enhancer rather than the issuer.

DIRECT PAY LETTER OF CREDIT: The Direct Pay LOC Bank (CalSTRS) issues a fronting letter of credit and a bank issues a standby letter of credit. For this letter of credit, the investor (through the trustee) looks to the Direct Pay LOC Bank for all interest and principal payments to investors. The obligor then reimburses the Direct Pay LOC Bank. If the obligor fails to reimburse for the LOC drawing, the standby bank reimburses CalSTRS.

EMPLOYER OR EMPLOYING AGENCY: Means the State or any agency or political subdivision thereof for which creditable service subject to coverage by the State Teachers' Retirement Plan is performed.

LETTER OF CREDIT: An instrument issued by a bank or pension plan that unconditionally promises to make debt service payments and provide liquidity support on a bond issue up to a stated amount for a specified period of time upon receipt of proper notice in the event of a default. Letters of credit are usually required for variable rate bond issues.

LINE OF CREDIT/LIQUIDITY FACILITY: This form of LOC is an availability to purchase securities under specific situations. The bonds or commercial paper that this facility supports may be remarketed on a daily, weekly, or monthly basis. There is a need to have their

marketability guaranteed. If there is a failed remarketing, CalSTRS may be required to “purchase” these bonds and receive pre-agreed interest payments. In the case of commercial paper, this commitment may be revocable under certain circumstances.

MONOLINE INSURER: An insurer that writes only financial guaranty insurance.

OBLIGOR: The obligor is the beneficiary of the funds raised by the bond issuance and is responsible for paying off the bonds.

PARTICIPATION: An ownership interest in a letter of credit or liquidity facility issued by another financial institution. The ownership interest in the letter of credit or liquidity facility is sold or purchased to decrease/increase direct risk exposure to an obligor.

REIMBURSEMENT AGREEMENT: An agreement between the credit enhancer and underlying obligor setting forth the terms and conditions of the letter of credit and the responsibilities of the obligor.

SAFE HARBOR TRANSACTION: A transaction where the State Teachers’ Retirement System extends credit enhancement to an Employing Agency. In such case, CalSTRS may have no more than a 25 % involvement in the credit enhancement transaction at the time of issuance. In addition, persons affiliated with the System, Employing Agencies, and other California public sector retirement systems would not be permitted collectively to account for more than 50 % of such credit enhancement transaction.

STANDBY LETTER OF CREDIT: A letter of credit that is drawn upon only if there are insufficient funds from other sources.

STANDBY BOND PURCHASE AGREEMENT: A form of liquidity facility or enhancement.

TRUSTEE: A financial institution with fiduciary responsibilities to bondholders (investors) to make principal and interest payments as well as administer all other aspects of the bond indenture.

J. Real Estate Investment Policy

EXECUTIVE SUMMARY

In accordance with the CalSTRS Investment Policy and Management Plan, IPMP, the California State Teachers' Retirement System Board, has established an allocation for investment in real estate, an illiquid equity-related asset. The primary objective for investment real estate is to improve diversification of the overall investment portfolio. The Real Estate Investment portfolio will also have secondary objectives to achieve a rate of return that corresponds to the amount of risk outlined in the Real Estate portfolio risk/return composite approved by the Investment Committee, to provide a stable cash flow to the investment portfolio, and to provide a hedge against inflation.

The CalSTRS' Real Estate investment assets are to be invested, administered, and managed in a prudent manner for the sole benefit of its participants and beneficiaries, in accordance with the California Constitution, the Teachers' Retirement Law, and other applicable statutes. No investment instrument or activity prohibited by the IPMP shall be authorized for the Real Estate portfolio.

The design of the Real Estate investment policy ensures that investors, managers, consultants, or other participants selected by CalSTRS take prudent and careful action while managing the Real Estate portfolio. The purchase, management, and sale of all types of real estate investments is performed by external professionals (managers) who are monitored and evaluated by internal investment officers, an external real estate consultant, and/or independent fiduciaries. CalSTRS believes that environmental, social, and governance, ESG, issues can affect the performance of our investments. As a result, the CalSTRS 21 Risk Factors have been developed as a tool that both internal and external investment managers are expected to use to assess the impact of ESG risk when making an investment on behalf of CalSTRS. The internal investment officers and independent fiduciaries operate under the direction of the chief investment officer, CIO. The external real estate consultant reports directly to the Board.

As with all other plan assets, these policies cannot be altered without explicit direction from the Board.

POLICY

INVESTMENT STRATEGY

The strategic objectives of the Real Estate portfolio are as follows:

- A. To provide improved diversification to the overall CalSTRS Investment Portfolio.
- B. To generate an enhanced yield to the actuarial earnings rate assumption.

- C. To provide stable cash flows; and
- D. To provide a hedge against inflation.

CALSTRS REAL ESTATE PERFORMANCE OBJECTIVE

CalSTRS Real Estate portfolio includes core, value add, and opportunistic risk strategies which, in aggregate, are structured to achieve a long-term total return in excess of the Real Estate Policy Benchmark.

POLICY BENCHMARK

The benchmark for Real Estate will be the NCREIF ODCE value weighted index net of fees.

STRATEGIC ASSET ALLOCATION

The asset allocation target and range for the Real Estate portfolio shall comply with the guidelines set forth in the IPMP. Adjustments from actual to target allocation shall be implemented within a time frame consistent with the provisions set forth in the IPMP.

PORTFOLIO SUB-CLASSIFICATIONS

A. Allocation

Over the long-term, the Real Estate portfolio shall be divided into four segments: 1) Core 2) Value Add 3) Opportunistic, and 4) Public.

Allocations to the Core, Value Add, Opportunistic and Public Portfolio segments shall be made to maximize the total return to CalSTRS while mitigating risk. As a moderate risk investor, CalSTRS’ long-term allocation ranges and long-term target allocations to these portfolios shall be:

Portfolio Segment	Policy Portfolio	Allocation Ranges	Permitted Deviation
Core	60%	50% - 75%	± 5%
Value Add	20%	10% - 30%	± 5%
Opportunistic	20%	10% - 30%	± 5%
Public	0%	0% - 15%	± 5%

It is recognized that the real estate asset class is cyclical. The table above depicts the targets and ranges for the various portfolio segments over the long-term. However, in response to changing

market conditions, as well as other relevant factors, the actual allocation may vary within the recommended ranges.

As investments in the value add and opportunistic portfolio mature, their characteristics may become core-like. CalSTRS staff and the consultant shall monitor the portfolio for instances when changes of the classification of certain investments are warranted. Reclassifications must be mutually agreed upon by staff and consultant and reported to the Investment Committee.

B. Core Portfolio

1. Characteristics

Core investments include existing, substantially leased, income-producing properties (typically stabilized at the time of acquisition) located principally in economically diversified metropolitan areas; asset types typically include office, retail, industrial, multi-family residential and hotels as well as alternative asset types included in the benchmark. While Core assets can be located in developed markets around the globe, investors' core properties typically have a home country bias.

2. Target Return

Over the long term, core investments are expected to produce a return net of fees of 7 percent. The ODCE benchmark will fluctuate in shorter time periods due to changing market conditions and the effect on appraisals over short time frames. Staff underwrites core investments that are expected to be held for 7 to 15 years to achieve unleveraged returns in this range but acknowledges the ODCE benchmark will fluctuate widely over 1 to 3 year periods.

3. Diversification

To manage risk, the core real estate portfolio will diversify its exposure by property type and location. It is expected that at various points in time, the portfolio may be more heavily exposed to a single property type or location by virtue of opportunities in the market that are expected to generate excess return above long term expectations. The diversification of the real estate portfolio will be compared to the composition of its peer benchmark the ODCE Index. Single property type or location variances in excess of +/- 5 percent will be reported to the Investment Committee with recommendations for action/inaction.

While there are no specific guidelines for diversification based on exposure to geographies having similar economic profiles and/or industry concentrations, the Real Estate portfolio shall be prudently diversified and monitored in this aspect.

4. Use of Leverage

The core portfolio is intended to generate income and lower total real estate portfolio volatility. However, limited use of leverage is permissible within the core portfolio to enhance investment returns and to mirror the ODCE Index. Core portfolio leverage will have a maximum of 40 percent of the aggregate gross fair market value of the funded investments in the core portfolio.

5. Transitional-Core Assets

'Transitional-Core' holdings are expected to meet all core definitions within a short period of time. Such holdings include but are not limited to: build-to-core, lease up strategies, forward commitments and higher-than-average leverage ratios. Inclusion of these assets within is limited to no more than 20% of the Core Portfolio. The percentage of Transitional-Core holdings will be compared to the percentage of similar holdings within the NCREIF ODCE index each quarter.

Classification of an asset as 'Transitional-Core must be agreed upon by Staff and Consultant.

The leverage on Transitional-Core will be measured each quarter and will be included in the total portfolio leverage test of no more than 40% loan to value.

C. Value Add Portfolio

1. Characteristics

Investments within the value add portfolio will generally have expected returns and levels of risk greater than those of a typical core investment. The investments represent those properties and/or investment strategies that require specialized acquisition and management expertise or skill to mitigate business and leasing risks associated with the investment strategy. Risks have historically included leasing, repositioning, redevelopment, and/or certain business operating expertise. The strategy includes the curing of identified deficiencies through intensive management, increased cash flow, and disposition of stabilized assets to capture value creation.

2. Target Return

The value add portfolio is expected to enhance performance of the Real Estate portfolio. It may offer limited current income, and returns are often largely dependent on future appreciation. Value add strategies have a long-term expected return of 7.5 percent after fees.

3. Diversification

The value add portfolio shall not have property type or geographic location allocation range limitations but will be monitored relative to its peer index the NCREIF-Townsend Value Add Index.

4. Use of Leverage

Leverage within the value add portfolio shall have a long-term target up to 65 percent, based on the aggregate gross fair market value of the funded investments in the value add portfolio. Individual strategies and/or relationships may have leverage up to 65 percent.

D. Opportunistic Portfolio

1. Characteristics

Investments within the opportunistic portfolio seek to capitalize on tactical opportunities, mispricing, or distress in the real estate and capital markets and are willing to assume additional risk. Investments include direct real estate assets in office, retail, industrial, residential, or specialized property types, as well as forms of investment such as land plays, operating companies, distressed debt/properties, and other specialized investments (e.g. brownfields). Opportunistic investments utilize development, extensive redevelopment, non-traditional investment vehicles (e.g. non-performing loans), entity level investments, or recapitalization of assets or companies. Investment strategies may also include international/emerging markets.

2. Target Return

Although the expected returns (and risks) vary widely among these investments, generally speaking the expected returns are 10 percent after fees.

3. Diversification

The opportunistic portfolio shall not have property type or geographic location allocation range limitations but will be monitored relative to its peer group the NCREIF-Townsend Opportunistic Index.

4. Use of Leverage

Individual strategies and/or relationships within the opportunistic segment use leverage to varying degrees. Restrictions on recourse, credit facilities, cross collateralization and debt service ratios will be vetted and approved during the due diligence process. In all cases,

risks associated with volatility and loss of equity will be mitigated sufficiently to allow for a reasonable risk adjusted return.

E. Public Portfolio

1. Characteristics

The public portfolio may be comprised of investments in both U.S. and non-U.S. publicly traded REITs and REOCs. It is expected to enhance the performance and liquidity of the total Real Estate portfolio, as well as contributing to the portfolio's diversification. Publicly-traded REITs and REOCs are typically more volatile than their private market counterparts; however, liquidity is generally greater. Publicly-traded REITs and REOCs are expected to utilize leverage commensurate with the market.

Public REITs and REOCs can provide the total Real Estate portfolio with greater access to property markets and assets, as well as captive and focused management in a structure that included corporate governance. Such investments may allow the Real Estate portfolio an opportunity to share in the operator's fee income and franchise value.

2. Target Return

Public investments are expected to meet or exceed the performance of specific mandate secured by each manager and detailed in the manager contract.

INVESTMENT POLICY GUIDELINES

A. Portfolio Leverage

CalSTRS shall employ leverage in the Real Estate portfolio in order to enhance investment returns. Such leverage may exist at the portfolio, manager, or investment level. Since leverage also increases the volatility of the Real Estate portfolio, careful consideration will be given to the impact of leverage on investment and portfolio risk. In addition, restrictions on recourse, credit facilities, cross collateralization and debt service ratios will be vetted and approved during the due diligence process. In all cases, risks associated with volatility and loss of equity will be mitigated sufficiently to allow for a reasonable risk adjusted return. Risk management will include a requirement that when debt is placed on wholly owned or joint venture assets, the use of leverage will require a return premium of no less than three basis points for each one percent of leverage used (eg. 50 percent leverage = 150 basis points additional premium over the unlevered return). Whenever possible, manager hurdles will be unlevered in order to compensate managers for returns generated through the operation of real estate rather than through financial structuring.

Leverage within each segment of the portfolio will be regularly monitored and reported to the Board for compliance.

B. Alignment of Interests

Preferred investments for CalSTRS will be those that exhibit the highest degree of management accountability and the greatest alignment of interests. As a matter of policy, CalSTRS will seek, but is not limited to, dedicated management teams that co-invest or have substantial ownership interest in the investment entity, controlling positions with provisions for liquidity, and disclosure, as well as the mitigation of conflicts of interest.

C. Liquidity

Real estate is an illiquid asset class and can provide no guarantees of liquidity. However, whenever possible investments shall be structured to include clearly defined redemption or termination provisions that offer investors some control. In addition, whenever possible, investments shall include features that enhance liquidity to investors such as (i) shorter investment time horizons and holding periods; (ii) provisions for interim liquidation of investments; (iii) multiple exit strategies; (iv) alignment of interests between management and investors, as well as management accountability; and (v) a readily tradable market for investor holdings.

D. Investment Prohibitions

1. CalSTRS will not invest in strategies that are intended to capitalize on the displacement of low income households; however, this section is not intended to prohibit investment in strategies that create new, or redevelop existing rent-regulated housing units, including, without limitation, strategies that include demolition of existing rent-regulated housing units, so long as:
 - a. Any rent-regulated housing units that are demolished as part of such investment or project are replaced with new rent-regulated housing units; and
 - b. Any persons lawfully residing in rent-regulated housing who are displaced as a result of such strategies receive relocation benefits in accordance with relocation requirements as mandated by the local housing authority or by state or federal relocation laws, if applicable.
2. This section shall not prohibit investment in existing low income housing tax credit or multifamily housing revenue bond financed assets with regulatory agreements that limit, among other things, allowable rent increases. However, such regulatory agreements do expire. Without replacement financing from regulatory authorities, this may cause certain assets to revert to market rate.
3. This prohibition shall apply to all private Real Estate investment strategies in which CalSTRS has a controlling interest.

4. Rent increases permitted by federal, state, or local ordinance for rent-regulated properties shall be deemed appropriate and consistent with this policy.
1. This Section shall not prohibit lawful eviction for cause such as illegal activity, tenant safety issues, disqualification under regulatory agreements or non-payment of rent.
2. If an investment manager makes investments with CalSTRS capital that are inconsistent with the stated prohibitions, CalSTRS will take appropriate action to enforce their policy up to and including not making any new investments with that manager.
3. Staff will report to the Investment Committee if significant unforeseen issues arise as a result of this investment prohibition.

E. Environmental Liability

Subject to the following provisions and restrictions, CalSTRS will prudently accept environmental exposure and potential liability in a manner consistent with overall industry standards applicable to institutional investors acting in a like manner under similar circumstances.

CalSTRS will not make investments in real estate with environmental conditions in the core portfolio unless: (i) the dollar value of the environmental risk can be quantified (ii) the cost of remediation can be quantified (iii) the environmental liability can be mitigated with measures already in place or to be implemented by the investment manager to effectively mitigate the risks to CalSTRS and result in an appropriate risk-adjusted rate of return (iv) any such potential environmental liability is limited to the particular real estate investment and (v) the real estate investment does not expose the entire CalSTRS portfolio to any potential liability. All environmental risks will be appropriately mitigated by factors that may include, but are not limited to, specific remediation planning, environmental insurance, indemnifications by creditworthy sellers, agreements with regulatory authorities, and the legal structure of ownership.

For investments held in separate accounts, the appropriate level of environmental risks to be assumed and the appropriate mitigation approaches shall be detailed in the CalSTRS Real Estate Guidelines. Environmental guidelines for investments in Commingled Funds and Joint Ventures will be addressed in the legal documents that control the activities and responsibilities of the Managing or General Partner of that investment opportunity.

F. Eligible Ownership Vehicles

For CalSTRS to meet its objectives in the real estate asset class, staff will select appropriate vehicles with structural aspects that provide for maximum liquidity and control while mitigating risk, and the highest level of accountability on the part of management and alignment of interests with CalSTRS. For this reason, the following ownership vehicles are allowable:

Separate Accounts

CalSTRS may enter into discretionary separate account relationships with real estate investment managers, subject to pre-approved investment guidelines, whenever possible, and/or clearly defined investment strategies. This delineation is known in the real estate industry as “discretion in a box”, which means the manager shall have the authority and discretion to execute a particular investment strategy only so long as each and every investment falls within the pre-approved guidelines for the portfolio. The director of real estate and a real estate portfolio manager must approve any deviations from the approved guidelines. For this reason, investments shall be structured to facilitate alignment of interests between management and CalSTRS, management accountability, investment monitoring, and liquidity.

In these separate accounts, CalSTRS shall have sole ownership of the asset(s) or may co-own the asset(s) with other institutional investors. CalSTRS will reserve the right to remove the real estate manager of any separate account, with or without cause, in a timely manner.

Joint Ventures

CalSTRS may invest with operating partners to execute defined investment strategies in which the operating partners have unique expertise. In these joint ventures, the operating partner shall also co-invest capital in the venture in an amount that is material to the partner. CalSTRS staff shall strive to incorporate similar governance provisions into the joint venture agreements as are obtained in CalSTRS’ separate account relationships.

Commingled Funds

To enable greater diversification and to reduce risk, investments in the Real Estate portfolio shall be made in participation with other institutional investors. Real estate investments may be made in commingled vehicles including, but not limited to (i) closed-ended funds such as group trusts, private REITs, limited liability companies, and limited partnerships; and (ii) open-ended funds (primarily bank and insurance company commingled accounts).

Investments in closed-ended commingled vehicles shall have clearly articulated and viable exit strategies through which assets can be disposed of or liquidated upon termination of the investment and on an interim basis. The term of these investments shall also be limited to no more than seven to ten years and shall provide for a winding-up and orderly liquidation within this time period. Investment agreements for closed-ended commingled vehicles shall include flexible provisions for removal of management by investors and interim liquidation of investor holdings.

Open-ended commingled fund investments shall include flexible redemption provisions, though such provisions often do not provide investors with liquidity at times when it is most needed; therefore, it is critically important that such investments be made with the most proactive of managers. In addition, to the extent possible, investments in closed and open-ended commingled fund vehicles shall include an opportunity for investors to participate on advisory boards.

To ensure adequate diversification and to reduce risk, no more than ten percent of CalSTRS' Real Estate portfolio shall be allocated to a single commingled fund in which CalSTRS does not exercise control over its capital. For the purpose of this document, "control over its capital" refers to the ability to time the exit from an investment vehicle or the termination of the manager of such vehicle.

Public REITs and REOCs

Investments in publicly-traded vehicles can offer the total Real Estate portfolio greater liquidity over private market opportunities; however, they tend to be more correlated with equities than private real estate investments. Therefore, the maximum equity investment to the public portfolio within the Real Estate portfolio shall be 15 percent.

G. Eligible Investment Types

Real estate investments may include direct or indirect equity investment in real estate (including all rights and interests incident thereto) such as (i) interests in corporations, partnerships, and other entities whose primary business is the acquisition, development, and operation of real property including publicly traded, or private real estate investment trusts ("REITs") and real estate operating companies ("REOCs"); (ii) participating or convertible participating mortgages or other debt instruments convertible to equity interest in real property based on investment terms (and not merely by foreclosure upon default); (iii) options to purchase real estate, leaseholds, and sale-leasebacks; and (iv) all other real estate related securities such as lower or un-rated tranches of pre-existing securitized or structured debt instruments such as mezzanine debt, which have equity features.

H. Discretionary Authority

The approval and rejection decision for real estate investments is delegated to staff with the following stipulations:

1. Staff has discretion to approve an initial commitment of CalSTRS equity to a new firm in a proportion up to 2 percent of the Net Asset Value (NAV) of the total Real Estate portfolio. Staff then has discretion to approve additional follow-on commitments to the same firm for up to 4 percent of the NAV of the total Real Estate portfolio.

Thereafter, incremental allocations beyond the 6 percent, which may represent the firm's NAV plus outstanding commitment, may be approved by staff, subject to review by the Investment Committee if the Investment Committee so requests. Staff will regularly inform the Investment Committee of firms when such decisions are made.

2. For firms that the Investment Committee has selected through a request for proposal process or approved as described above, Staff has discretion to approve up to two transactions in any rolling 12-month period, which may include co-invest opportunities

for up to 10 percent of the NAV of the total Real Estate portfolio. Individual transactions include all major capital decisions including but not limited to acquisition, renovations and dispositions. Staff will regularly inform the Investment Committee when such decisions are made.

All real estate investments are subject to appropriate due diligence as defined in the CalSTRS Real Estate Guidelines. Percentage limitations specified above are based on commitments of equity made by CalSTRS.

I. Responsible Contractor Policy

The California State Teachers' Retirement System has a deep interest in the condition of workers employed by the CalSTRS and its advisors. CalSTRS, through the CalSTRS Responsible Contractor Policy supports and encourages fair wages and fair benefits for workers employed by its contractors and subcontractors, subject to fiduciary principles concerning duties of loyalty and prudence, both of which further require competitive returns on the CalSTRS real estate investments. The CalSTRS endorses small business development, market competition, and control of operating costs. The CalSTRS believes that an adequately compensated and trained worker delivers a higher-quality product and service. CalSTRS requires its real estate managers to abide by the Responsible Contractor policy on all applicable investments.

J. Investment Manager Diversification

To reduce risk, the real estate portfolio shall be diversified by investment manager. No single investment manager shall manage more than 30 percent of the net asset value of targeted real estate portfolio at the time of allocation.

K. Non-U.S. Investments

The allocation range for non-U.S. investments shall be 0 percent to 30 percent of the NAV of the total Real Estate portfolio. Investments outside the U.S. will be classified as core, value add, or opportunistic taking into account any additional country-specific risks.

VALUATION AND REPORTING

CalSTRS' investments in real estate shall be valued at least annually on a fair market value basis. In certain circumstances, when it is inappropriate or not possible to value investments at market, an alternate method of valuation shall be used.

On a quarterly basis, performance data shall be collected by the designated contracting entity. The entity shall calculate returns as requested by the staff and consultant. Based upon the calculated returns, the consultant shall prepare a report which evaluates CalSTRS' portfolio

diversification and investment performance. The consultant report shall include comparisons to benchmarks, indices and peer groups as appropriate (see Glossary – “Indices and Peer Groups”) The consultant report shall be presented semi-annually to the Investment Committee.

CalSTRS staff shall endeavor to ensure that investment valuations and returns reported to the Investment Committee are calculated in accordance with guidelines established by NCREIF, the CFA Institute (formerly AIMR), the Pension Real Estate Association (“PREA”), and the National Association of Real Estate Investment Managers (“NAREIM”); as included in the most recent editions of the Real Estate Information Standards and the NCREIF Market Value Accounting Policy Manual.

To the extent that investment managers do not report CalSTRS investments in a manner consistent with these guidelines, CalSTRS staff shall work with these investment managers to obtain the most appropriate information. CalSTRS’ investment managers shall be notified at the inception of their contracts that their failure or inability to provide accurate and timely financial reporting may constitute grounds for termination.

GUIDELINES FOR SELECTION, MONITORING, EVALUATION, AND TERMINATION OF MANAGERS

The selection of real estate investments shall be guided by the "prudent expert" standard, embracing the prudent decision-making process typically employed by experts in the areas of real estate acquisition, development, operation, disposition, and portfolio management.

Selection of Investment Managers

CalSTRS seeks to retain investment managers that possess superior capabilities in the selection and management of real estate assets. With this objective in mind, prospective investment managers shall be evaluated for selection based on criteria including, but not limited to: (i) the suitability of the organization’s investment, relative to CalSTRS’ investment guidelines and objectives; (ii) the quality, stability, integrity, and experience of the management team; (iii) the ability and willingness of the organization to dedicate sufficient resources and personnel to optimally manage CalSTRS’ investments; (iv) the reasonableness of investment terms and conditions, including provisions to align interests of management and CalSTRS; (v) the appropriateness of management controls and reporting systems; and (vi) commitment to responsible contracting policies, workplace diversity, and community involvement.

Monitoring, Evaluation, and Termination of Investment Management Organizations

CalSTRS’ investment managers shall be monitored and evaluated continuously, based on their performance relative to stated objectives and benchmarks, and relative to the performance of firms managing similar investments in the marketplace. In addition, investment managers shall be monitored for compliance with investment guidelines, policies, and procedures of the Real Estate portfolio, and other contractual provisions. Manager performance should be evaluated over meaningful time intervals to ensure that performance is indicative of management’s efforts. The performance of the core portfolio should be evaluated on a three-year trailing performance

basis, while the performance of the value add and opportunistic portfolios should be evaluated on a three- to five-year trailing performance basis.

Consideration shall also be given to the financial strength of the investment manager, the level of client service given to CalSTRS, as well as changes within the managing organization such as the continuity of personnel assigned to CalSTRS' investments, among other items. CalSTRS shall seek to liquidate investments with management organizations found to be deficient relative to CalSTRS' investment standards.

ANNUAL BUSINESS PLAN

The Real Estate portfolio will be managed according to an annual business plan whose main business components will encompass an analysis of the investment environment, a review of the investment strategy, a review of the diversification ranges, a review of projected versus actual returns, and a resource allocation budget.

CASH TRANSFER LIMITATIONS

The following non-cumulative limits apply with respect to Real Estate Investment staff or executive officers signing for cash disbursements for Real Estate investment portfolio transactions:

Investment Officer I	\$ 15 million
Investment Officer II	\$ 50 million
Investment Officer III	\$ 70 million
Associate Portfolio Manager	\$ 100 million
Portfolio Manager	\$ 200 million
Director of Real Estate	\$ 400 million
Deputy Chief Investment Officer	\$ 1.5 billion
Chief Investment Officer	\$ 1.5 billion

POLICY MONITORING AND MODIFICATION

The Consultant shall monitor the investment process for compliance with this policy and report to the CalSTRS Investment Committee as requested.

The Real Estate policy shall be reviewed periodically to determine if modifications are necessary or desirable. Any changes shall be subject to the approval of the Investment Committee.

Revised February 2, 2006

Revised to adjust allocation ranges, definitions of core and tactical portfolios, discretion limits to staff, and to introduce public-traded investments on July 13, 2007.

Revised to place the portfolio into core, value add and opportunistic categories; adjust allocation ranges for these categories and add language for leverage limitations; and add new benchmarks for these new categories on June 3, 2010.

Revised to accommodate benchmark availability and performance evaluation requirements as well as adjustments to Cash Transfer Limitations on November 3, 2011
Revised to add ESG Risks Policy reference on September 10, 2013
Revised to change benchmark to ODCE on April 4, 2014
Revised to update two sections of the policy document to align the portfolio to current market conditions and the conclusions contained in the 2015 Asset Allocation Study on November 4, 2015
Revised to define APM trading limits and modify PM trading limits on April 5, 2017
Revised to give staff the ability to manage the portfolio using strategies consistent with those implemented within the NCREIF ODCE index on July 12, 2017

GLOSSARY

APPRECIATION – The percentage change in the market value of a property or portfolio over the period of analysis.

INDICES AND PEER GROUPS – A series of databases with risk/return information that allows for comparative performance evaluation within an asset class.

- **NCREIF Fund Index - Open End Diversified Core Equity (“NFI-ODCE”) Index** – A capitalization-weighted return index consisting of infinite life vehicles with multiple investors and the ability to enter and exit on a periodic basis. Funds maintain low leverage; equity ownership in US stabilized office, retail, industrial, and multi-family and hotel properties.
- **NCREIF-Townsend Value Add Index** – A capitalization-weighted return index consisting of finite life vehicles with multiple investors. Manager expertise is expected to create value by correcting operational or asset deficiencies.
- **NCREIF-Townsend Opportunistic Index** – A capitalization-weighted return index consisting of finite life vehicles with multiple investors. Investments are at the higher end of the risk/return spectrum and vary greatly across intended strategies for return generation.
- **NCREIF-Townsend Vintage Year Indices** – A capitalization-weighted return index consisting of finite life vehicles across (or within) strategy segments grouped by the year in which initial real estate investments occurred.

CAPITAL IMPROVEMENTS – Expenditures that cure or arrest deterioration of property or add new improvements to prolong its life.

CO-INVESTMENT – Investments where the management organization has a capital investment and ownership share.

COMMINGLED FUND – A term applied to all open-ended and closed-ended pooled investment vehicles designed for institutional tax-exempt investors. A commingled fund may be organized as a group trust, partnership, corporation, insurance company separate account, private real estate investment trust, or other multiple ownership entity.

- **Open-ended Fund** – A commingled fund with no finite life, which allows continuous entry and exit of investors, and typically engages in ongoing investment purchase and sale activities.
- **Closed-ended Fund** – A commingled fund with a stated termination date, with few or no additional investors after the initial formation of the fund. Closed-ended funds typically purchase a portfolio of properties to hold for the duration of the fund and, as sales occur, typically do not reinvest the sales proceeds.

DISCRETION – The level of authority given to an investment manager over the investment and management of a client’s capital once that capital is allocated to the investment manager.

FAIR MARKET VALUE – The highest price a property would bring if exposed for sale in the open market by a willing seller to a willing buyer with both parties being fully informed of all the uses and purposes to which the property is reasonably adaptable and available.

HOTEL – May include budget, economy, mid-scale, upscale, luxury, extended stay and independent hotels and any other properties that provide hospitality services.

INCOME – The component of return derived from property or portfolio operations during the period of analysis.

INDUSTRIAL – May include manufacturing, R & D Flex, Office Showroom, Freight forwarding/logistics and warehouse distribution.

INVESTMENT MANAGER – A company that, by contractual agreement, provides property investment opportunities and/or property asset management services.

JOINT VENTURE – A structure wherein CalSTRS and a partner form a partnership to purchase and/or operate an investment, or investments.

LAND – Undeveloped land parcels.

LEVERAGE – The use of borrowed funds to increase purchasing power and, ideally, to increase the profitability of an investment.

LIMITED PARTNERSHIP – A partnership with both general and limited partners in which the general partner manages the business and assumes full liability for the partnership obligations with the liability of the limited partners generally restricted to their capital contributions.

MULTI-FAMILY – May include high-rise, low-rise, and garden complexes of multiple rental units in an apartment building. May also include condominiums, student-oriented complexes and senior rental housing with limited or no medical services.

NCREIF INDEX – National Council of Real Estate Investment Fiduciaries Index; a property-level performance benchmark for institutionally owned real estate, calculated on a quarterly basis.

NET ASSET VALUE (NAV) – Represents total assets at fair market value minus liabilities.

NEW FIRM - Investment Manager with whom CalSTRS Real Estate has a contractual relationship of less than one year.

OFFICE – May include multi-tenanted buildings in both central business district and suburban locations. Types of use in office buildings may include commercial banks, financial buildings that serve as office space, owner-occupied space including corporate headquarters and branch offices. Others, such as government administration buildings, medical offices and Office R & D which is used primarily for office, may also be included.

OPPORTUNISTIC – A phrase characterizing an investment in underperforming and/or undermanaged assets typically purchased from distressed sellers, utilizing high levels of leverage with the expectation of near-term increases in cash flow and value.

PROPERTY MANAGEMENT – The various functions that are performed at the property level in order to assure timely collection of rents, payment of expenses, and supervision of on-site activities.

RETAIL – May include neighborhood, community, regional, super-regional, fashion/specialty, power, theme/festival, outlet and single tenant centers in which tenants sell goods and services.

TOTAL RETURN – The sum of the income and appreciation returns.

VALUE-ADDED – A phrase commonly used by investment managers to describe a management approach to a property with the connotation that their skills will add value, which otherwise would not be realized.

K. Policy on California Investments

EXECUTIVE SUMMARY

The Investment Committee of the California State Teachers' Retirement Board is responsible for recommendations to that Board regarding the investment policy and overall investment strategy of the management of the Teachers' Retirement Fund. The Committee is also responsible for establishing all policies regarding the structure and objectives of the Fund. Within this authority, the Investment Committee hereby establishes a policy and guidelines for investments within the State of California. CalSTRS California Investment portfolio assets are to be invested, administered and managed in a prudent manner for the sole benefit of its participants and beneficiaries, in accordance with the California Constitution, the Teachers' Retirement Law, and other applicable statutes. No investment instrument or activity prohibited by the IPMP shall be authorized for the California Investments portfolio.

CalSTRS believes that environmental, social, and governance (ESG) issues can affect the performance of our investments. As a result, the CalSTRS 21 Risk Factors have been developed as a tool that both internal and external investment managers are expected to use to assess the impact of ESG risk when making an investment on behalf of CalSTRS.

As with other plan assets, these policies cannot be altered without explicit direction from the Board.

Laws and Statutes

All investments, including those under this policy, must be in accordance with the California Constitution Article 16, Section 17, and the California Education Code, Part 13 Teachers Retirement Law Chapter 4, Section 22250 et al, and the board approved Investment Policy and Management Plan.

Policy Objectives

As the defined benefit fund for all of California's public school teachers, and one of the largest pools of investment capital in the state, the Investment Committee recognizes the importance of the California State Teachers' Retirement System's portfolio and its investment activities within the State of California. While the exclusive purpose of any investment is to achieve the desired return, at a prudent level of risk, the Committee recognizes that many investment activities may have the ancillary benefit of creating economic value and activity that benefits the state and its citizens. Therefore, within the investment activity of each asset class, if all things are equal, especially in regards to risk, return, and diversification, CalSTRS will give preference to investments focused or based in California.

This policy delineates two objectives. The first concerns the investment priority for debt investments secured by California residential real estate under California Education Code Section 22362. The second establishes a goal for investments in underserved markets, primarily in California. The policy also describes the general investment plan to meet the goal set forth for investment in California's emerging markets.

POLICY

Education Code Section 22362

The California Legislature has established, with Education Code Section 22362, an investment priority for debt investments secured by California residential real estate. The statute sets forth an objective to invest 25 percent of the Fund's net cash flow into California residential real estate debt securities. It does not take precedence over the Board's fiduciary responsibility as set forth in both the California Constitution and Education Code. During any fiscal year in which the Board is not able to comply with this priority, the Board shall be required to submit a resolution of its findings and determinations to the Governor and Joint Legislative Audit Committee.

The annual report will demonstrate the amount of net cash flow available for investment, and the amount of residential real estate debt purchased during the year. As added information, the report should also note the level of California residential equity real estate purchased during the year.

California Emerging Markets Investments

Definition

California emerging market investments shall focus on investment opportunities in traditionally underserved markets primarily located within California. For example, underserved markets would include urban and rural communities undergoing, or in need of, revitalization where there are assets (e.g. an available labor pool, underutilized infrastructure) conducive to business development. Staff will develop internal guidelines and procedures to define underserved areas for each asset class.

Investment Goals

A. Consistent with fiduciary standards and the appropriate risk and return for each investment within each asset class, the Committee sets an aspirational goal of two percent of the total Defined Benefit plan be invested in the California emerging market. The Committee shall periodically review the goal in light of its fiduciary duty and overall risk and return experience.

B. For allocation purposes, California emerging markets investments will include, but not be limited to, existing and future investments in asset classes including public equity, fixed income, private equity, real estate, infrastructure, and in companies or investments that substantially reside in underserved areas.

Investment Approach and Parameters

A. All California emerging markets investments shall be consistent with the Committee's fiduciary obligations and approved investment policies and guidelines.

B. California emerging markets investments shall receive the same level of due diligence, as any other investment, whether conducted by staff, designated outside advisors or consultants within the CalSTRS Investment Portfolio.

C. California emerging markets investments, whether in a stand-alone portfolio or incorporated with like investments (which have no emerging market-targeted orientation), shall be priced at current market prices and shall be subject to applicable performance measurements.

D. California emerging markets investments shall be monitored by using appropriate investment benchmarks developed by staff and the general consultant and approved by the Investment Committee.

Investment Plan

This section sets forth the general plan to achieve the goal as established for investment in the California emerging markets. The plan is divided between the public markets and the private markets portions of the portfolio. The public markets are comprised of assets that are daily valued and regularly traded on open exchanges; the asset classes are U.S. and Non-U.S. equity and fixed income. The private markets arena is characterized by investments that are longer-term and illiquid in nature. While these investments can involve a higher level of risk and return, they are often investments that have a more direct impact in achieving the ancillary benefits espoused by the Policy. The private markets assets classes include real estate, private equity, credit enhancement and infrastructure.

Public Markets

Within the publically traded asset classes the Board has established a set benchmark and the objective of tight tracking error to those respective benchmarks. As a result, the ability to invest to achieve ancillary benefits is reduced. While the Fund has a considerable exposure to public companies that operate and employ people in the California emerging markets through the fixed income, U.S., and even the non-U.S. equity portfolio, these investments are primarily focused on tracking the underlying benchmark. The area of greatest opportunity is in the fixed income asset class, where mortgaged backed securities and home loans can be purchased that concentrate on these areas as long as they fulfill the primary need to match the respective benchmark.

Private Markets

Within the parameters of the Policy on California Investments, the Board has set forth the desire to invest a portion of the private equity portfolio, real estate portfolio, and if possible the infrastructure portfolio, in investments that focus on investment opportunities in traditionally underserved markets primarily located in California. Staff will maintain internal guidelines and procedures to define underserved areas for each asset class.

Responsibilities

Staff: Each June 30, fiscal year end, staff will prepare an annual report summarizing its compliance with California Education Code Section 22362. In addition, annually, staff will prepare a report identifying the California content of the investment portfolio, and particularly the amount of investments in the underserved portions of the state. Staff will also monitor the policy and recommend any enhancements or changes to the Committee.

Investment Committee: As it deems appropriate, in keeping with the investment standard, shall administer and review this policy periodically.

Originally Adopted by the Teachers' Retirement Board on October 10, 2001

Revised on July 10, 2002

Revised to annual report September 4, 2008

Revised to include ESG language and infrastructure June 6, 2014

L. Infrastructure Investment Policy

EXECUTIVE SUMMARY

In accordance with the CalSTRS Investment Policy and Management Plan, IPMP, the California State Teachers' Retirement System Board, has established an allocation for investment in infrastructure, also known as infrastructure investments, an illiquid equity-related asset. The primary objective for investment in infrastructure is to improve diversification of the overall investment portfolio. The Infrastructure Investment portfolio will also have secondary objectives: to achieve a rate of return greater than the actuarial earnings rate assumption, to provide a stable cash flow to the investment portfolio, to hedge against long-term liabilities and to provide a hedge against inflation.

The Infrastructure portfolio assets are to be invested, administered and managed in a prudent manner for the sole benefit of its participants and beneficiaries, in accordance with the California Constitution, the California State Teachers' Retirement Law and other applicable statutes. No investment instrument or activity prohibited by the IPMP shall be authorized for the Infrastructure portfolio. The portfolio can include limited partnerships, direct investments, co-investments and secondary interests.

The design of the CalSTRS Infrastructure Investment Policy ensures that investors, managers, consultants, or other participants selected by CalSTRS take prudent and careful action while managing the portfolio. The purchase, management and sale of all types of infrastructure investments is performed by external professionals/managers, who are monitored and evaluated by internal investment officers, an external infrastructure consultant, and/or independent fiduciaries. CalSTRS believes that environmental, social, and governance, ESG, issues can affect the performance of our investments. As a result, the CalSTRS 21 Risk Factors have been developed as a tool that both internal and external investment managers are expected to use to assess the impact of ESG risk when making an investment on behalf of CalSTRS. The internal investment officers and independent fiduciaries operate under the direction of the chief investment officer, CIO. Review of the portfolio will fall under the general consultant, who reports directly to the Investment Committee. If a specialty asset class specific consultant is retained, that consultant would also report directly to the Investment Committee.

As with all other plan assets, these policies cannot be altered without explicit direction from the Board.

POLICY

INVESTMENT OBJECTIVES

The strategic objectives of the Infrastructure portfolio are as follows:

- A. To provide improved diversification to the overall CalSTRS Investment Portfolio.

- B. To generate an enhanced yield to the actuarial earnings rate assumption and provide stable cash flows.
- C. To provide a hedge for long-term liabilities.
- D. To provide a hedge against inflation.
- E. To preserve investment capital.
- F. To act as a responsible steward of infrastructure investments through responsible contracting and environmental practices, efficient operation of assets, and production of quality services and products.

PERFORMANCE OBJECTIVES

The Infrastructure portfolio shall be managed over the long-term to accomplish the following:

Exceed a blended weighting of the private infrastructure benchmark and a publicly listed benchmark;

1. Private infrastructure to exceed, on a net-of-fees basis, a target return equal to the Consumer Price Index for all Urban Consumers (“CPI”) plus four percent (4%) while maintaining an appropriate level of diversification to mitigate risk.
2. Publicly listed strategies to exceed the relevant public market benchmark selected for the strategy.

BENCHMARK

The Infrastructure portfolio’s policy benchmark is a blend of the private and publicly listed infrastructure benchmarks. Additional criteria will be applied to the performance of individual portfolio segments, investment managers, investments having a focus on a particular subsector or geographic location, and for investments having higher risk categories. As appropriate, customized benchmarks will be used to measure performance of investments within the portfolio.

STRATEGIC ASSET ALLOCATION

The asset allocation target and range for the portfolio shall comply with the guidelines set forth in the IPMP. Adjustments from actual to target allocation shall be implemented within a time frame consistent with the provisions set forth in the IPMP.

PORTFOLIO DIVERSIFICATION

Diversification within the portfolio is critical to control risk and concentrations and to maximize returns. The specific investments shall be aggregated, evaluated and monitored to control unintended biases. Diversification can occur across the following parameters:

A. Infrastructure Sectors

Infrastructure is characterized by investment opportunities within various industries. The Infrastructure portfolio may contain investment opportunities within, but not limited to, the following infrastructure sectors:

- a. Energy resources and utilities – clean energy, electricity, gas, geothermal, hydrocarbons, pipelines, power distribution, storage, transmission, renewables, wind-generation, nuclear, etc.
- b. Transportation assets – bridges, railways, roadways, transit, tunnels, airports, etc.
- c. Ports – barges, terminals, etc.
- d. Water and waste – water distribution, storage, treatment, desalination, waste management, etc.
- e. Communications – broadcast towers, wireless towers, cable systems, satellite networks, etc.
- f. Other infrastructure investments that are aligned with CalSTRS’ strategic objectives.

The following types of assets will not be allowable investments for the Infrastructure portfolio: prisons and schools. Any uncertainty will be reviewed by the chief investment officer before consideration of a transaction and/or presented to the Investment Committee before consideration of a transaction.

B. Strategic Objectives

Over the long-term, the Infrastructure portfolio shall be divided into four portfolio sub-classes: 1) core; 2) value-added; 3) opportunistic and 4) publicly listed. The strategic objective of the core portfolio is to produce stable current income and market level returns commensurate with a low to moderate level of risk. The value-added portfolio is expected to enhance the performance of the Infrastructure portfolio, provide additional diversification and take on additional corresponding risk. The opportunistic portfolio may produce a higher return while introducing more risk due to the developmental/greenfield nature of underlying investments or their location outside of more developed markets/non-OECD. The publicly listed portfolio is expected to enhance diversification, performance and liquidity of the Infrastructure portfolio. Assignment of an investment to a particular portfolio shall be based on the investment’s risk and return characteristics. The following table outlines the Infrastructure portfolio sub-classifications in broad terms and is not intended to be prescriptive.

INFRASTRUCTURE PORTFOLIO SUB-CLASSIFICATIONS

Strategy	Characteristics	Allocation	Cash Yield	Target Real Return		Type of Assets (examples not limited to)
CORE (Mature / Brownfield)	<ul style="list-style-type: none"> • Buy-and-hold assets • Mature operating assets with steady cash flow • Essential services • Regulated • Long-term contracts • Low risk and low growth mostly • Long-term monopolistic positions • Minimal to no patronage risk • Cash yield is dominant part of total return • Credible investment grade counterparty 	45%-75%	4%-8%	3%-4%		<ul style="list-style-type: none"> • Regulated utilities • Bridges, tolls • Pipelines, energy transmission and distribution • Water and waste water • Social infrastructure • Public private partnerships (PPP)/Private finance initiatives (PFI)
	Geographic Regions: Global with minimal non-OECD activities					
VALUE-ADDED (Growth/ Rehabilitated)	<ul style="list-style-type: none"> • Buy-and-build positions • Operating assets with growth phase • Higher risk and return • Can involve expansion or rehabilitation to assets • Increased sensitivity to GDP, patronage risk, development risk and refinance risk • Cash yield and net capital appreciation are equal 	20%-50%	2%-5%	4%-6%		<ul style="list-style-type: none"> • Power generation • Rapid rail • Transportation • Parking systems - non concession based • Contracted renewable power
	Geographic Regions: Global with minimal non-OECD activities					
OPPORTUNISTIC (Development / Greenfield)	<ul style="list-style-type: none"> • Mostly development assets • High risk and return • Capital appreciation is dominant part of total return 	0%-20%	0%-5%	6%-9%		<ul style="list-style-type: none"> • Logistics • Satellite networks
	Geographic Regions: Global with some non-OECD activities					
PUBLICLY LISTED	<ul style="list-style-type: none"> • Mature, operating assets with steady cash flows • Medium risk and modest growth • Liquidity and market beta • Cash yield and capital appreciation equal • May include non-essential service - construction, manufacturing and technology • Characteristics - cyclical lifecycle, limited use of long term contracts and speculative/sub investments grade counterparty 	0%-10%		4%-6%		<ul style="list-style-type: none"> • Master limited partnerships (MLP) • Other infrastructure stocks • Debt securities
	Geographic Regions: Global with minimal non-OECD activities					
OVERALL PORTFOLIO		100%		4%		

C. Allocation

Allocations to the core, value-added, opportunistic and publicly listed portfolio sub-classes shall be made to maximize the total return to CalSTRS while mitigating risk. As a moderate risk investor, CalSTRS' long-term allocation ranges and long-term target allocations to these portfolios shall be:

Portfolio Sub-Classification	Long-Term Allocation Range
Core	<u>45% - 75%</u>
Value-Added	<u>20% - 50%</u>
Opportunistic	<u>0% - 20%</u>
Publicly Listed	<u>0% - 10%</u>

The table above depicts the ranges for the various portfolio segments over the long-term. However, in response to changing market conditions, as well as other relevant factors, the actual allocation may vary within the recommended ranges, and may tilt defensively or aggressively toward the extreme ends of the ranges. A range has been set for each segment to provide capacity if the portfolio falls out of balance due to the illiquid nature of infrastructure assets and/or specific opportunities to tactically over and/or underweight a segment based on compelling opportunities or fundamental issues.

From time to time, the actual allocations to the portfolio segments may fall outside the recommended ranges. In these instances, adjustments from the actual to the prescribed allocation range shall be implemented over a reasonable time frame (within a one to three year period, unless otherwise specified), with ample consideration given to preserving investment returns to CalSTRS.

As investments in the value-added and opportunistic portfolios mature over time, their characteristics may become more like core assets and value-added assets, respectively. CalSTRS Staff and the consultant shall monitor the portfolio for instances when changes of the classification of certain investments are warranted. Reclassifications must be mutually agreed upon by staff and consultant.

Portfolio Development

The Infrastructure portfolio is relatively new and, as the portfolio progresses toward full investment, concentrations related to the established allocation, diversification, leverage and risk ranges shall be considered by using the target IPMP allocation as the denominator.

In addition, infrastructure investments are generally long-term investment opportunities and during volatile periods, short-term movements and tactics may be applied in managing the portfolio. From time to time, the actual allocations to the portfolio segments may fall outside the recommended ranges.

D. Geographic Regions

Investments in the Infrastructure portfolio will be made in various regions including: the United States (all regions), developed non-U.S. countries such as the United Kingdom, Japan, Western Europe, countries that are members of the Organization for Economic Co-operation and Development (“OECD”); and certain non-OECD countries regions such as Africa, Asia (non-Japan), the Caribbean, Central America and South America in accordance with CalSTRS policies. To reduce risk, investments in the Infrastructure portfolio shall be located in the developed countries with limited non-OECD exposure.

Geographic Region	Allocation Range	Examples (but not limited to)
United States and Canada	30% - 70%	
OECD – Ex US and Canada	10% - 50%	Australia, Austria, Belgium, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Latvia, Luxemburg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Spain, Slovenia, Sweden, Switzerland, Turkey, and the UK.
Non-OECD	0% - 20%	Africa, Asia (non-Japan), Caribbean, Central America, and South America.

Consideration of infrastructure investment opportunities in the state of California will be given a preference ahead of other transactions. Investments in California must have the same market risk and return as any other similar infrastructure investment; and, preference will not be given in legal or financial terms. While there are no specific guidelines for diversification based on exposure to geographies having similar economic profiles and/or industry concentrations, the Infrastructure portfolio shall be prudently diversified and monitored in this aspect.

E. Risks

The Infrastructure policy and Infrastructure investment activities are subject to the CalSTRS 21 Risk Factors identified in the CalSTRS Investment Policy and Management Plan. Risks associated with investing in infrastructure projects, assets and vehicles will be mitigated sufficiently to allow for a reasonable risk adjusted return. Potential risks associated with the Infrastructure portfolio include, but are not limited to the following:

- a. **Country/Emerging Market Risk.** Geographic, economic, currency and government risks may be associated with investing in all countries.
- b. **Environmental.** Investment returns may be impacted by environmental issues, events and risks.

- c. **Financing Risks.** Changes and volatility in the credit and equity markets may impact financing efforts and the capital structures of underlying infrastructure investments.
- d. **Labor Risk.** Infrastructure investments may have an impact on labor groups and public sector employment opportunities.
- e. **Leverage.** Infrastructure investments may utilize significant leverage which may increase financial and refinancing risks.
- f. **Liquidity Risk.** As infrastructure investments may have long durations, they often are illiquid. Secondary markets for infrastructure investments may not be fully established or may provide limited opportunities.
- g. **Market Risk.** The infrastructure market is a developing market globally and investment opportunities may be impacted by market supply and demand.
- h. **Political and Headline Risks.** Infrastructure investments may involve political activities and may introduce headline risk to investors.
- i. **Regulatory Risk.** Changes in regulatory mandates may impact investment returns and strategies.
- j. **Structural Risks.** CalSTRS is accustomed to negotiating certain clauses, rights and protections within its partnership agreements.
- k. **Valuation Risks.** Investments and partnerships will be assessed to determine if appropriate and reasonable valuation procedures and methodologies are utilized by managers and investment partners.

PORTFOLIO CONSTRUCTION

A. Portfolio Leverage

CalSTRS shall employ leverage in the Infrastructure portfolio in order to enhance investment returns. Such leverage may exist at the portfolio, manager or investment level. Since leverage also increases the volatility of the Infrastructure portfolio, careful consideration will be given to the impact of leverage on investment and portfolio risk. In addition, limitations on the amount of leverage at the individual asset or investment entity level, as well as debt service coverage requirements, will be negotiated or arranged wherever possible.

Leverage at the aggregate Infrastructure portfolio level shall be monitored and managed to maintain it at no higher than 60 percent (60%). To preserve the character of the asset class with CalSTRS' composite investment portfolio, the aggregate asset class shall not be overleveraged. This shall be measured quarterly by comparing the principal amount of debt secured by infrastructure investments in the Infrastructure portfolio to the aggregate gross fair market value of the Infrastructure portfolio. To the extent that leverage exceeds the maximum, CalSTRS shall make reasonable efforts to reduce the leverage ratio to below the maximum allowable, within a reasonable time frame of one to three years.

B. Investment Life Cycle

The basic phases of an asset's life cycle can include predevelopment, development, leasing, operating and redevelopment. In general, assets/projects in the earlier stages of their respective life cycles and redevelopments possess greater risks and thus should offer the Infrastructure portfolio incrementally higher expected returns. To reduce risk, the portfolio shall be appropriately diversified accordingly to life cycle, with the core portfolio having a majority of investments that are brownfield, mature assets. The value-added and opportunistic portfolios may contain a higher concentration of investments undergoing development or redevelopment. The publicly listed portfolio shall be reasonably liquid and may not be as affected by the life cycles of underlying infrastructure assets.

C. Alignment of Interests

Preferred investments for CalSTRS will be those that exhibit the highest degree of management accountability and the greatest alignment of interests. As a matter of policy, CalSTRS will seek, but is not limited to, dedicated management teams that co-invest or have substantial ownership interest in the investment entity, controlling positions with provisions for liquidity and disclosure, as well as the mitigation of conflicts of interest.

D. Exit Strategy

Investments in infrastructure assets should have clearly articulated and viable exit strategies through which assets can be disposed of or liquidated upon termination of the investment manager. Infrastructure assets are long life assets which provide long-term investment opportunities of ten years or more. As a result, infrastructure investments occasionally can be illiquid assets that may not have clearly defined redemption or termination provisions that offer investors immediate liquidity. While some infrastructure investments may have liquidation mechanisms, others may not have clearly defined liquidation events. The current marketplace for infrastructure provides liquidation opportunities via the sale of these investments or assets to investment funds and institutional investors. However, as the marketplace for infrastructure continues to expand, more exit strategy opportunities will be available to investors. An alignment of interests between management and investors as well as management accountability needs to be maintained with infrastructure investments.

E. Environmental Liability

CalSTRS encourages the prudent use of sustainable development methods and operational practices when reasonable and economically feasible. Subject to the following provisions and restrictions, CalSTRS will prudently accept environmental exposure and potential liability in a manner consistent with overall industry standards applicable to institutional investors acting in a like manner under similar circumstances.

CalSTRS will not make investments in infrastructure with environmental conditions in the core portfolio unless: (i) the dollar value of the environmental risk can be quantified, (ii) the cost of remediation can be quantified, (iii) the environmental liability can be mitigated with measures already in place or to be implemented by the investment manager to effectively mitigate the risks

to CalSTRS and result in an appropriate risk-adjusted rate of return, (iv) any such potential environmental liability is limited to the particular infrastructure investment, and (v) the infrastructure investment does not expose the entire CalSTRS portfolio to any potential liability. All environmental risks will be appropriately mitigated by factors that may include, but are not limited to: specific remediation planning, environmental insurance, indemnifications by creditworthy sellers, agreements with regulatory authorities and the legal structure of ownership.

For investments held in separate accounts, the appropriate level of environmental risks to be assumed and the appropriate mitigation approaches shall be detailed in the CalSTRS Infrastructure procedure guidelines. Environmental guidelines for investments in commingled funds, joint ventures and co-investments will be addressed in the legal documents that control the activities and responsibilities of the managing or general partner of that investment opportunity.

F. Eligible Ownership Vehicles

For CalSTRS to meet its objectives in the infrastructure asset class, staff will select appropriate vehicles with structural aspects that provide for maximum return and control while mitigating risk and cost, and the highest level of accountability on the part of management and alignment of interests with CalSTRS. For this reason, the following ownership vehicles are allowable:

Accounts

CalSTRS may enter into discretionary accounts (e.g. separate accounts, joint ventures, club accounts, consortiums, etc.) with particular infrastructure investment managers, subject to pre-approved investment guidelines, whenever possible. Accounts will have varying levels of discretion determined by CalSTRS at the outset of the strategy. The CIO must approve any deviations from the approved guidelines. For this reason, investments shall be structured to facilitate alignment of interests between management and CalSTRS, management accountability, investment monitoring and liquidity.

In these accounts, CalSTRS shall have sole ownership of the asset(s) or may co-own the asset(s) with other institutional investors. CalSTRS will reserve the right to remove the infrastructure manager of any account, with or without cause, in a timely manner. CalSTRS will seek to construct accounts with fee structures commensurate to the strategies being employed.

Commingled Funds

To enable greater diversification and to reduce risk, investments in the portfolio shall be made in participation with other institutional investors. Infrastructure investments may be made in commingled vehicles including, but not limited to: (i) closed-ended funds such as group trusts, limited liability companies and limited partnerships; and (ii) open-ended funds.

Investments in closed-ended commingled vehicles shall have clearly articulated and viable exit strategies through which assets can be disposed of or liquidated upon termination of the investment and on an interim basis. The term of these closed-end comingled funds should be no less than ten years. Investment agreements for closed-ended commingled vehicles shall include

flexible provisions for removal of management by investors and interim liquidation of investor holdings.

Open-ended commingled fund investments shall include flexible redemption provisions, and staff will select managers with a history of successful redemptions that demonstrate a capability of providing liquidity.

In addition, to the extent possible, investments in closed-end and open-ended commingled fund vehicles shall include an opportunity for investors to participate on advisory boards.

Co-Investments

CalSTRS may invest alongside commingled funds and accounts to increase tactical exposures to selected assets in preferred sectors or geographies. In these co-investment opportunities, the commingled fund shall co-invest capital in the venture, provide management of the asset, control the exit of the investment, and give CalSTRS greater access to the asset. CalSTRS will seek to reduce the blended aggregate fee load of the relationship with the investment manager with fee free co-investments when possible.

Publicly Listed Infrastructure Investments

Investments in publicly-traded vehicles can offer the total Infrastructure portfolio greater liquidity over private market opportunities; however, these investments tend to be more correlated with equities than private infrastructure investments. Therefore, the maximum investment to the public infrastructure portfolio shall be ten percent (10%).

G. Concentration Limits

To ensure adequate diversification and to reduce risk, after the initial start-up period for the Infrastructure portfolio, no more than fifteen percent (15%) of CalSTRS' Infrastructure Portfolio as measured by the target IPMP allocation shall be allocated to a single investment manager subject to and consistent with Section I – Discretionary Authority below

H. Eligible Investment Types

Infrastructure investments may include direct or indirect equity investment in infrastructure (including all rights and interests incident thereto) such as: (i) interests in corporations, partnerships, and other entities whose primary business is the acquisition, development, and operation of the underlying infrastructure assets including publicly traded, or private infrastructure assets, and infrastructure operating companies; (ii) other debt instruments convertible to equity interest in infrastructure assets based on investment terms; (iii) and all other infrastructure related securities such as lower or un-rated tranches of pre-existing securitized or structured debt instruments such as mezzanine debt, which have equity features.

I. Discretionary Authority

The approval decisions for infrastructure investments are delegated to staff with the following guidelines:

1. Staff has discretion to approve an initial commitment of CalSTRS equity to a new investment manager up to \$ 300 million, for accounts and commingled funds with an equivalent amount allowed for co-investments (as defined in Eligible Ownership Vehicles identified in section F above) in each instance. Staff then has discretion to approve subsequent commitments to the same investment manager up to a maximum of no more than fifteen percent (15%) of the CalSTRS Infrastructure Portfolio as measured by the target IPMP allocation.

Thereafter, if a single investment manager manages a total portfolio in excess of fifteen percent (15%) of the CalSTRS Infrastructure Portfolio as measured by the target IPMP allocation, additional allocations or commitments may still be approved by staff, but are subject to review by the Investment Committee if the Committee so requests. Staff will inform the Committee of firms under consideration via the transactions pipeline semi-annual report.

2. For Eligible Ownership Vehicles such as accounts and co-investments, where CalSTRS has more investment discretion and where the investment managers are approved within the above referenced discretionary limits, or firms that have been selected through a request for proposal process, staff has discretion to approve individual assets so long as no single asset represents more than five percent (5%) of the CalSTRS Infrastructure Portfolio as measured by the target IPMP allocation. Staff will inform the Investment Committee when such decisions are made through the semi-annual investment reports.

The approval decision under staff delegation shall be completed following a positive written recommendation by CalSTRS staff and either 1) a program advisor, or 2) an independent fiduciary. The investment analysis and due diligence will be conducted in the same manner as previously done for the Investment Committee and as described in the CalSTRS Infrastructure procedure guidelines.

J. Responsible Contracting Policies

CalSTRS has a deep interest in the condition of workers employed by the California State Teacher's Retirement System or CalSTRS and its advisors. Through the CalSTRS Responsible Contractor Policy, CalSTRS supports and encourages fair wages and fair benefits for workers employed by its contractors and subcontractors, subject to fiduciary principles concerning duties of loyalty and prudence, both of which further require competitive returns on CalSTRS' infrastructure investments. CalSTRS endorses small business development, market competition and control of operating costs. CalSTRS believes that an adequately compensated and trained worker delivers a higher quality product and service.

CalSTRS shall secure a written agreement from infrastructure investment managers for which the Responsible Contractor Policy applies, such that all contractors, investors, managers, consultants or other participants shall adhere to the CalSTRS Responsible Contractor Policy, as updated by CalSTRS. If an investment manager does not adopt either the CalSTRS Responsible Contractor Policy or an internal policy, CalSTRS will not invest in the investment manager.

CalSTRS shall give a strong preference to all domestic infrastructure investment vehicles that have adopted an internal policy regarding responsible contracting consistent with the CalSTRS Responsible Contractor Policy, subject to CalSTRS' fiduciary duty. This preference shall apply to any domestic infrastructure investment vehicle for which the Responsible Contractor Policy is not applicable by its terms other than to make a good faith effort to comply with the spirit of the policy. This specifically applies to investments including, but not limited to, commingled funds, opportunity funds, mezzanine debt and hybrid debt investments. If the manager of any domestic infrastructure investment vehicle does not agree to comply with the CalSTRS Responsible Contractor Policy or adopt an internal policy regarding responsible contracting, and, if staff deems it appropriate based on all the circumstances, including the intent of this policy as well as the investment merits of the investment vehicle, staff may recommend the potential investment to the Investment Committee and the Committee shall make a determination whether or not to invest in such investment vehicle.

In addition, in the event CalSTRS has determined that during the life of an investment vehicle there is a violation of the above stated terms, staff shall be precluded from making an investment in a follow on fund with the investment manager. If staff determines it appropriate, based on all the facts and circumstances, staff may recommend the investment in the subsequent fund to the Investment Committee, which will determine whether to invest in the follow on fund consistent with its fiduciary duty.

K. Domestic Public Sector Jobs

Staff will present to the Investment Committee for consideration any investment that would directly impact California public sector jobs. Staff shall secure a written agreement from the managers of any domestic investment vehicle (as described herein) that states, substantially in all material respects, that in circumstances where the investment vehicle is working with a state, local or municipal agency to establish public-private partnerships ("PPPs") or to bid on public offers for the sale, lease or management of public assets, the investment vehicle shall make every good faith effort to recognize the important role and contribution of public employees to the development and operation of such assets. In particular, the investment vehicle shall make good faith efforts to ensure that such transactions have a de minimus adverse impact on existing jobs. These efforts may include working directly with public employees, government officials or collective bargaining groups, as appropriate; in order to take such reasonable actions as may be within the (investment vehicle's) control to mitigate such potentially adverse effects. Compliance with this requirement shall be a key consideration by CalSTRS when reviewing any future investment opportunities with an investment manager.

In addition, in the event CalSTRS has determined that during the life of an investment vehicle there is a violation of the above stated terms, staff shall be precluded from making an investment in a follow on fund with the investment manager. If staff determines it appropriate, based on all

the facts and circumstances, staff may recommend the investment in the subsequent fund to the Investment Committee, which will determine whether to invest in the follow on fund consistent with its fiduciary duty.

VALUATION AND REPORTING

These assets will be valued in accordance with FASB and GASB regulations for long-term illiquid investments. Values will be marked to market as available. Performance will be reported semi-annually as part of the overall investment performance review. Annually, staff will prepare a specific report on infrastructure investments. If the portfolio grows beyond its initial allocation more detailed and re-occurring reporting will be required.

INFRASTRUCTURE INVESTMENT SELECTION

The selection of infrastructure investments shall be guided by the "prudent expert" standard, embracing the prudent decision-making process typically employed by experts in the areas of infrastructure acquisition, development, operation, disposition and portfolio management. The Inflation Sensitive staff will develop internal procedures and processes that deal with the selection, monitoring, evaluation and termination of investment managers in accordance with the Infrastructure Policy.

ANNUAL BUSINESS PLAN

The Infrastructure portfolio will be managed according to an annual business plan whose main business components will encompass an analysis of the investment environment, a review of the investment strategy, a review of the diversification ranges, a review of projected versus actual returns, and a resource allocation budget.

Cash Transfer Limitations

The following non-cumulative limits apply with respect to infrastructure investment officers and senior investment staff signing for daily cash disbursements for investment portfolio transactions:

Investment Officer I	\$ 20 million
Investment Officer II	\$ 30 million
Investment Officer III	\$ 50 million
Associate Portfolio Manager	\$ 70 million
Portfolio Manager	\$ 75 million
Investment Director	\$ 200 million
Deputy Chief Investment Officer	\$ 500 million
Chief Investment Officer	\$ 500 million

Based on recently audited CalSTRS Investment Programs, internal auditors have recommended the use of percentages in lieu of specific dollar amounts for daily trading limits. As investments are added to the Infrastructure portfolio and the portfolio matures, the daily cash transfer limits will be revisited, so as to have a daily transfer limits based on a percentage of the portfolio.

POLICY MONITORING AND MODIFICATION

The general consultant or specialized infrastructure consultant, if retained, shall monitor the investment process for compliance with this policy and report to the CalSTRS Investment Committee on a semi-annual basis.

This Infrastructure investment policy shall be reviewed periodically to determine if modifications are necessary or desirable. Any changes shall be subject to the approval of the Investment Committee.

Initial Adoption July 2008

Revised to provide a more clear and focused approach for the program, April 7, 2011

*Revised sections related to excluded assets, co-mingled fund size limit, leverage and daily cash limits,
November 2012*

Revised to add ESG Risks policy reference on September 10, 2013

Revised to provide staff discretion and remove obsolete glossary terms, February 7, 2014

To revise the program benchmark and to provide more clarity to program guidelines, February 6, 2015

To primarily revise the benchmark objective and individual asset discretionary limit, April 8, 2016

Revised to reflect new reporting frequency on April 5, 2017

Revised to clarify program targets, discretionary limits, and concentration limits on November 1, 2017

M. Divestment Policy

DIVESTMENT POLICY

As set forth in the California Constitution, Article 16, Section 17, and the California Education Code, Section 22250, the CalSTRS Retirement Board, its Investment Committee, and staff have fiduciary duties with respect to the system and the plan. These duties include duties of loyalty and prudence to invest “with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims.” (Ed. Code, sec. 22250(b).)

This policy sets forth CalSTRS’ policy for responding to external or internal initiatives to divest of individual or groups of securities for purposes of achieving certain goals that do not appear to be primarily investment related. The Investment Committee opposes any divestment effort that would either implicitly or explicitly attempt to direct or influence the Investment Committee to engage in investment activities that violate and breach the Trustees’ fiduciary responsibility. Consistent with its fiduciary responsibility and the concepts of diversification and passive index management, the Investment Committee does not and will not systemically exclude or include any investments in companies, industries, countries or geographic areas, except in cases where: one of the CalSTRS 21 Risk Factors is violated over a sustained time frame to the extent that it becomes an economic risk to the Fund, a potential for material loss of revenue exists, and where it weakens the trust of a significant portion of members to the System.

When pressured to divest, CalSTRS firmly believes that active and direct engagement is the best way to resolve issues. Face to face meetings with shareowners and senior management, or the Board of Directors, are essential to bringing about change in a corporation. No further action will be taken until all efforts at engagement have been fully exhausted; efforts at engagement include, but are not limited to: shareholder resolutions, media campaigns, and other efforts at engagement.

CalSTRS’ commitment to engagement with companies rather than divestment is based on several considerations: (i) divestment would eliminate our standing and rights as a shareowner and foreclose further engagement; (ii) divestment would be likely to have negligible impact on portfolio companies or the market; (iii) divestment could result in increased costs and short-term losses; and (iv) divestment could compromise CalSTRS’ investment strategies and negatively affect investment performance.

If engagement fails to resolve the risk factor sufficiently, the CIO will bring the issue before the Investment Committee for consideration of divestment from the applicable securities. The Investment Committee will receive input from the following, but not limited to: investment managers, investment consultants, investment staff, fiduciary counsel, academics, and experts in the particular field or issue. If the Investment Committee determines that the making of an investment or continuing to hold a security is imprudent and inconsistent with the fiduciary duty,

the Investment Committee will instruct investment staff to remove the security from the portfolio.

Divestment does not apply to segments of the portfolio that track market indices, as CalSTRS policies require those segments to invest in all companies included in an index. Additionally, the policy does not apply to investments in a Limited Partnership due to CalSTRS position of limited liability as a Limited rather than General Partner.

CalSTRS will exclude or eliminate investments that fall within the terms of a State or Federal law regarding divestment, if the Investment Committee finds that divestment is consistent with its fiduciary duties and divestment is determined not to be imprudent.

REPORTING

On at least a semi-annual basis, the Chief Investment Officer will prepare a comprehensive report that shows the performance difference between any divestment taken under this Policy and the unmodified CalSTRS benchmark of the respective asset class.

Any divestment decision should be reviewed at least annually by the CIO to ensure the key factors and risks continue to warrant divestment. The Investment Committee, at any time, can request a divestment decision be revisited.

*Approved: March 5, 2009
Revised to reflect new reporting frequency on April 5, 2017*

N. Innovation Portfolio Policy

EXECUTIVE SUMMARY

In accordance with the CalSTRS Investment Policy and Management Plan (IPMP), the California State Teachers' Retirement System Board (Board) has established an Innovation Portfolio. The primary objective for the Innovation Portfolio (Portfolio) is to invest in strategies that do not fit any of CalSTRS' existing asset classes. The goal is to develop a procedure for exploring new concepts that are expected to improve diversification of the overall investment portfolio when fully implemented. The Portfolio's secondary objective is to incubate investment programs that would improve the risk and return characteristics of CalSTRS' Fund.

The CalSTRS Innovation assets are to be invested, administered, and managed in a prudent manner for the sole benefit of its participants and beneficiaries, in accordance with the California Constitution, the California State Teachers' Retirement Law, and other applicable statutes. No investment instrument or activity prohibited by the IPMP shall be authorized for the Innovation Portfolio.

The Innovation Portfolio Policy (Policy) ensures that investors, managers, consultants, or other participants selected by CalSTRS take prudent and careful action while managing the Portfolio. The purchase, management, and sale of all Portfolio products are performed by external and/or internal professionals (managers) who are monitored and evaluated by internal investment officers, a Portfolio consultant, and/or independent fiduciaries. CalSTRS believes that environmental, social and geopolitical (ESG) issues can affect the performance of our investments. As a result, the CalSTRS 21 Risk Factors have been developed as a tool that both internal and external investment managers are expected to use to assess the impact of ESG risk when making an investment on behalf of CalSTRS. The internal investment officers and independent fiduciaries operate under the direction of the Chief Investment Officer (CIO). Review of the Portfolio will fall under the general Consultant (Consultant), who reports directly to the Investment Committee. If a specialty asset class specific consultant is retained, that consultant will report directly to the Investment Committee.

Policies approved by the CalSTRS' Investment Committee cannot be altered without explicit direction from the Board.

POLICY

This document outlines the policy for the management of CalSTRS' Innovation Portfolio. These policies are designed to set the boundaries for oversight and management of the Portfolio, while allowing sufficient flexibility in the management process to manage risk and capture investment opportunities.

Policies for the management of the Innovation Portfolio (Portfolio) are listed below:

1. The Portfolio's assets are to be invested in a prudent manner for the sole benefit of its participants and beneficiaries, in accordance with applicable portions of the California Teachers' Retirement Law.
2. CalSTRS will invest in investment strategies that generally fall outside of the traditional asset classes currently used by the Board. The purpose is to provide the Board with the opportunity to invest in a wide spectrum of investment opportunities that will be required to demonstrate success before committing larger dollar amounts to a specified strategy. Within three years, CalSTRS will decide if a strategy should continue within the Innovation portfolio, be dedicated to a new asset class, be included with one of the traditional asset classes, or be terminated.
3. Each strategy will have its own specific performance metric. The Portfolio shall have a blended performance benchmark comprised of the weightings for each of the strategies utilized in the Innovation Portfolio multiplied by their respective benchmarks. Over the long-term, the Innovation Portfolio seeks to produce a positive real return.
4. The Portfolio will not hold any securities prohibited by the most recent Investment Resolution.
5. To achieve the stated performance objective, the Portfolio will invest in a diversified portfolio of strategies. Staff will select appropriate alternative investment sources with structural aspects that provide for the maximum return while mitigating risk and cost.
6. CalSTRS may enter into discretionary separate account relationships with investment funds/managers, subject to pre-approved investment guidelines. The Chief Investment Officer must approve any deviations from the approved guidelines. For this reason, investments shall be structured to facilitate alignment of interests between management and CalSTRS, management accountability, investment monitoring, and liquidity.
7. The assets under management (AUM) in the Portfolio shall not exceed 2.5 percent of the CalSTRS' total fund market value. To provide diversification, the size of each individual strategy shall be limited to a maximum of half-a-percent (0.5%) of the CalSTRS' total fund market value, calculated using the total commitments as of the investment decision date.
8. The CIO has the authority to approve commitments to Innovation portfolio strategies within the boundaries established by these policies. All investments are subject to appropriate due diligence as defined in the CalSTRS Innovation Portfolio Guidelines and will only be approved by the CIO following an affirmative recommendation from the Director of

Innovation & Risk and consultant (e.g., general or specialized independent consultant, if required).

9. CalSTRS' investment personnel have authority to manage the Portfolio. If prudent, CalSTRS may elect to manage a strategy internally. Any internally managed strategy will be approved by the Chief Investment Office and General Consultant. The delegated non-cumulative daily limits for approval of a commitment, internal management trading and/or cash transfers to a strategy are designated below. Directors of other asset classes may approve transactions with the consent of the CIO or Director of Innovation and Risk.

Investment Officer I	\$15 million
Investment Officer II	\$15 million
Investment Officer III	\$50 million
Associate Portfolio Manager	\$100 million
Portfolio Manager	\$200 million
Director of Innovation & Risk	\$300 million
Deputy Chief Investment Officer	\$500 million
Chief Investment Officer	\$500 million

The approval and rejection decision for Innovation investments may be delegated to Staff. All investments are subject to appropriate due diligence as defined in the CalSTRS' Innovation Portfolio Guidelines.

10. Investments in the Portfolio should have clearly articulated and viable exit strategies through which assets can be disposed of or liquidated upon termination of the investment manager.
11. The Chief Investment Officer shall monitor the implementation of the Portfolio in compliance with investment policies. A report to the CalSTRS' Board shall be made annually or as otherwise requested.

Policy for Innovation Portfolio First Reading February 5, 2009
Policy for Innovation Portfolio Second Reading and Adoption March 5, 2009
Revised to add ESG Risks Policy reference on September 10, 2013
Revised to update portfolio AUM and delegated limits December 2, 2013
Revised to clarify trading limit language April 8, 2016
Revised to define APM and DCIO trading limits on April 5, 2017

GLOSSARY

ALPHA – Portfolio's return relative to the return of the portfolio's benchmark.

ASSET ALLOCATION – Process of allocating investments optimally across a set of asset classes.

BASIS POINTS – Measure to describe the percentage change in value or rate of a financial instrument (1/100th of 1%).

BENCHMARK – Standard against which the performance of a strategy or portfolio is measured.

CORRELATION – Measure of the strength of a relationship between two securities, portfolios, or asset classes.

DIVERSIFICATION – Reduction in risk is obtained by investing among a number of different investment opportunities.

INFLATION-LINKED ASSETS – Security which is expected to deliver a higher return than the rate of inflation.

NON-TRADITIONAL ASSET CLASSES/STRATEGIES – Investments whose investment performance not correlated with that of stocks, bonds, real estate, private equity, and cash. It may include hedge funds and commodities. CalSTRS may investigate alternative investment strategies for the stock or bond traditional asset class.

OPPORTUNISTIC – Invest in strategies that CalSTRS believes will provide a superior return.

RISK-ADJUSTED RETURN – Measure of how much risk is involved to produce the investment return.

SHARPE RATIO – Risk-adjusted measure to determine the reward per unit of risk.

TRADITIONAL ASSET CLASSES – Stocks, bonds, real estate, private equity, and cash are fundamental components of an investment portfolio.

VOLATILITY – Measure of the dispersion of returns for a security or index.

O. Commodity Portfolio Policy

INTRODUCTION

In accordance with the Investment Policy and Management Plan (Plan), the California State Teachers' Retirement System (CalSTRS) has established a Commodity Portfolio. The primary objective for the Commodity Portfolio (Portfolio) is to hedge sudden, unexpected increases in inflation.

The Portfolio is to be invested, managed and sold in a prudent manner for the sole benefit of CalSTRS' participants and beneficiaries, in accordance with the Teachers' Retirement Law and other applicable statutes. No investment vehicle or activity prohibited by the Investment Resolution adopted by the Board in 1984, as amended occasionally, will be authorized for the Portfolio.

CalSTRS' Investment Committee has established the asset allocation and strategic objectives for the Portfolio. The Commodity Portfolio Policy (Policy) ensures that investors, managers, consultants, or other participants selected by CalSTRS take prudent and careful action while managing the Portfolio. The purchase, management, and sale of all Portfolio products are performed by external and/or internal professionals (managers) who are monitored and evaluated by internal investment officers, a Portfolio consultant, and/or independent fiduciaries. The internal investment officers and independent fiduciaries operate under the direction of the Chief Investment Officer (CIO). Review of the Portfolio will fall under the general Consultant (Consultant), who reports directly to the Investment Committee. If a specialty asset class specific consultant is retained, that consultant will report directly to the Investment Committee.

Policies approved by the CalSTRS' Investment Committee cannot be altered without explicit direction from the Investment Committee.

POLICY

This document outlines the policy for the management of the CalSTRS Commodity Portfolio (Portfolio). These policies are designed to set the boundaries for oversight and management of the Portfolio, while allowing sufficient flexibility in the management process to manage risk and capture investment opportunities.

Policies for the management of the Portfolio are listed below:

1. The Portfolio's assets are to be invested in a prudent manner for the sole benefit of its participants and beneficiaries, in accordance with applicable portions of the California Teachers' Retirement Law.
2. As part of the Innovation Portfolio, the Commodity Portfolio Policy will adhere to the Innovation Portfolio Policy.
3. The purpose of the Portfolio is to provide the Board with the opportunity to obtain exposure to commodities utilizing commodity futures and other derivatives. The Portfolio will be required to demonstrate success before committing larger dollar amounts to the strategy. Within three years, CalSTRS will decide if the Portfolio should graduate and be incorporated into a new strategic class, be included within one of the traditional asset classes or be terminated.
4. The Portfolio's performance shall be benchmarked against the Dow Jones-UBS Commodities Index. Investment Managers are expected to deliver at least 25 basis points per year over the benchmark.
5. The Portfolio will not hold any securities prohibited by the most recent Investment Resolution.
6. To achieve the stated performance objective, the Portfolio will invest in a diversified portfolio of active futures/derivatives managers. Staff will select appropriate managers with structural aspects that provide for the maximum risk-adjusted return while mitigating costs.
7. CalSTRS may enter into discretionary separate account relationships with investment funds/managers, subject to pre-approved investment guidelines. The CIO must approve any deviations from the approved guidelines. For this reason, investments shall be structured to facilitate alignment of interests between management and CalSTRS, management accountability, investment monitoring, and liquidity.
8. The initial assets under management (AUM) in the Portfolio shall not exceed \$150 million.

9. All investment products considered for the Portfolio will be carefully evaluated to determine the expected benefits to the Portfolio. Such investment products will be approved by the CIO, investment staff and consultant (e.g., general or specialized independent consultant if required). The delegated limits for approval of commitment to a manager designated as follows:

Chief Investment Officer	\$100 million
Director of Innovation & Risk	\$75 million
Portfolio Manager	\$50 million
Investment Officer III	\$40 million

The approval and rejection decision for commodity investments may be delegated to staff. All investments are subject to appropriate due diligence as defined in the CalSTRS Innovation Portfolio Guidelines.

10. CalSTRS' investment personnel have authority to manage the Portfolio. If prudent, CalSTRS may elect to manage a strategy internally. Any internally managed strategy must first be approved by the Chief Investment Office and General Consultant.
11. Investments in the Portfolio should have clearly articulated and viable exit strategies through which assets can be disposed of or liquidated upon termination of the investment manager.
12. The CIO shall monitor the implementation of the Portfolio in compliance with investment policies. A report to the CalSTRS' Board shall be made annually or as otherwise requested.

Policy for Innovation Portfolio First Reading and Adoption, November 4, 2010

GLOSSARY

ACTIVE INVESTING – Portfolio management strategy where the manager makes investments with the goal of outperforming a benchmark index.

ALPHA – Portfolio's return relative to the return of the portfolio's benchmark.

ASSET ALLOCATION – Process of allocating investments optimally across a set of asset classes.

ASYMMETRIC RETURNS – Investment opportunities whereby the potential profit or probability of profit is higher than the potential loss or probability of loss. The risk/reward relationship is asymmetric with respect to the magnitude and frequency of positive versus negative returns.

BACKWARDATION – Futures contracts with a later maturity date trade at a discount to futures contracts with an earlier maturity date, generating a positive roll return when a futures contract is rolled.

BASIS POINTS – Measure to describe the percentage change in value or rate of a financial instrument (1/100th of 1%).

BENCHMARK – Standard against which the performance of a strategy or portfolio is measured.

BETA – The relative volatility of an investment compared to the market as a whole, often proxied by a broad index. The market itself has a beta of 1.0. A beta above 1.0 is more volatile than the overall market, while a beta below 1.0 is less volatile.

CARRY COSTS – Costs associated with holding a physical commodity, such as storage, insurance and transportation costs.

CASH YIELD – A component of the futures return equivalent to the interest earned on the cash not required as collateral for the futures contract.

CBOE – Chicago Board Options Exchange.

CME – Chicago Mercantile Exchange.

COMMODITY TRADING ADVISOR (CTA) – An individual or firm that advises clients on or manages a managed future account, which contains options and futures. CTAs must register with the Commodity Futures Trading Commission and the National Futures Association.

CONTANGO – Futures contracts with a later maturity date trade at a premium to futures contracts with an earlier maturity date, generating a negative return when the futures contract is rolled.

CONTRACT or DELIVERY MONTH – The specified month within which a futures contract matures and can be settled by delivery of the underlying commodity.

CORRELATION – Measure of the strength or direction of a relationship between two assets, portfolios or securities.

COUNTERPARTY – The opposite party in a bilateral contract or transaction such as a swap. There are two counterparties to each trade.

DIVERSIFICATION – A risk management technique to reduce risk by investing among a variety of assets within a portfolio.

DOW JONES-UBS COMMODITY INDEX – An index composed of commodity futures traded on U.S. exchanges.

DOWNSIDE DEVIATION – The volatility of returns that are negative.

DOWNWARD SLOPING – A situation in which nearby futures contract prices are higher than futures contract prices with later maturities.

ENHANCED INDEXING – A strategy that follows rules similar to an index but slightly diverts from the index to maintain a high beta to the benchmark while reducing volatility and enhancing return.

EQUAL-WEIGHTED – Each sector in an index is given the same weight in that index.

EQUAL RISK-WEIGHTED – Each sector in an index is given a weight such that the volatility that each sector contributes to the index is equal.

EXCESS RETURN – Return in excess of a market rate or target rate of return.

FINANCIAL ASSET – An asset, such as stocks and bonds that derives its value from a contractual claim.

FRONT-MONTH CONTRACT – Futures contract with the earliest maturity date. Also called the “nearby contract.”

FULLY FUNDED – The investor must invest cash equivalent to the full value of the investment. Also called an “unlevered” investment.

FUTURES CONTRACT or FUTURE – A publicly traded, standardized agreement to buy or sell a specified quantity of a given commodity at a future date at an agreed-upon price.

ICE – Intercontinental Exchange, which operates OTC (over-the-counter) electronic exchanges.

INFLATION-LINKED BONDS – Bonds that pay yields that are tied to the inflation rate. Examples include U.S. TIPS (Treasury Inflation-Protected Securities) and U.K. Linkers.

KURTOSIS – A statistic used to measure the "peakedness" of a probability distribution and occurrence of fat tail events. The standard normal distribution has excess kurtosis of zero. Positive kurtosis indicates a "peaked" distribution with fatter tails and negative kurtosis indicates a "flat" distribution with thinner tails.

LONG – One who has bought a futures contract to establish a market position or one who owns an inventory of commodities.

MASTER LIMITED PARTNERSHIP (MLP) – Limited partnerships that are publically traded on a U.S. securities exchange. MLPs pay no income tax, and instead pay out their income to their shareholders.

MATURITY DATE – The date on which a futures contract expires and the holder of the future must accept the underlying commodity for delivery in exchange for a pre-specified price.

MEAN-VARIANCE OPTIMIZATION – A quantitative asset allocation tool used to identify the maximum return portfolio for a selected level of risk.

MERC – The Chicago Merc is the Chicago Mercantile Exchange (CME). The New York Merc is the New York Mercantile Exchange (NYMEX).

NEARBY FUTURES CONTRACT – Futures contract with the earliest maturity date. Also called the "front-month" contract.

NOMINAL RETURN – The real return plus the inflation rate.

NYMEX – New York Mercantile Exchange.

OPEN INTEREST – The total number of futures contracts that are not closed or delivered on a particular day, or the total number of contracts held by market participants at the end of the day.

OVER-THE-COUNTER (OTC) MARKET – The trading of commodities, contracts or other instruments directly between two parties off of a regulated exchange.

PASSIVE INVESTING – Portfolio management strategy where the manager makes as few portfolio decisions as possible in order to minimize transaction costs and mimic the performance of the benchmark index.

PRICE DISCOVERY – The process of determining the price level for a commodity based on supply and demand conditions.

REAL ASSET – Physical, identifiable assets, such as gold, oil and land.

REAL RETURN – The nominal return less the inflation rate.

RISK-ADJUSTED RETURN – Measure of how much risk is involved to produce the investment return.

ROLLING A FUTURES CONTRACT – Selling (buying) a nearby contract and buying (selling) a contract with a later maturity date to avoid taking delivery of (delivering) the underlying commodity.

ROLL RETURN – Return generated from the difference in price between a nearby contract and a contract further out on the curve.

SEPARATE ACCOUNT – An account whereby the individual securities held in the account are segregated, owned by the account holder and managed by a professional money manager.

SHARPE RATIO – Measure of the excess return (alpha or return over a cash yield) per unit of risk in an investment.

SHORT – The selling side of a futures contract.

SKEW – A statistic used to measure the symmetry of a distribution around its mean value. Normal distributions are perfectly symmetrical and have zero skew. Negative skew indicates a distribution with a downside bias. Positive skew indicates a distribution with an upward bias.

SPOT MARKET – Market of an immediate delivery of and payment for the commodity.

SPOT PRICE – The current market price of the commodity.

SWAP – An agreement between two counterparties to exchange a stream of payments over time according to specified terms. For example, in a commodity swap, Counterparty A may pay Counterparty B a payout based on the price of a commodity, while Counterparty B pays Counterparty A a payout based on the level of a commodity index.

UPWARD SLOPING – A situation in which nearby futures contract prices are lower than futures contract prices with later maturities.

VOLATILITY – Measure of the dispersion of returns for a security or market index.

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P. CalSTRS Pension2® 403(b) and 457(b)

OVERVIEW

Purpose

The California State Teachers' Retirement System established the Pension2 Personal Wealth Program for the benefit of eligible school employees, including members of CalSTRS and CalPERS. Pension2 offers 403(b) annuity contracts and custodial accounts and 457(b) investment plans, which offer opportunities for additional retirement savings to supplement defined benefit pension accruals. Pension2 eligibility is governed by Education Code sections 24950(a) and 24975(a).

The Investment Policy Statement for Pension2 403(b) and 457(b) provides policy direction and procedural guidelines for the selection and ongoing monitoring of investment options available through Pension2. It includes strategic objectives and a framework that promotes prudent investment oversight and administration of Pension2.

On June 7, 2013, the Teachers' Retirement Board delegated programmatic authority for Pension2 to the Chief Executive Officer. The Chief Executive Officer may delegate such authority to other CalSTRS officers and employees.

This investment policy statement is effective as of the date the Board adopts it, and may be amended at any time by the Board.

Program Administrator

CalSTRS is the Pension2 administrator.

Program Address

CalSTRS Pension2®
100 Waterfront Place
West Sacramento, CA 95605

Investment Options Subject to the Pension2 Investment Policy Statement

The Pension2 403(b) program has a 403(b)(1) annuity component and a 403(b)(7) custodial account component, which are collectively operated as a product offering and not as a plan. The 457(b) program may be adopted by an eligible employer as a stand-alone plan or as a product within the employer's plan. Pension2 assets are self-directed—participants make their own investment selections from the investment options available under the program.

Strategic Objective

The strategic objective of Pension2 is to offer participants a range of investment options to allow them to save for retirement and supplement their defined benefit pension. The program seeks to enable participants to achieve a portfolio of individual account investments with aggregate risk and return characteristics appropriate for long-term retirement savings. Program investments are participant-directed—participants are responsible for developing an investment strategy for their investment accounts. Participants are expected to:

- Allocate existing account balances to the available investment options based on their individual circumstances, goals and objectives, and risk tolerances;
- Reallocate account balances and directions of future contributions as their personal circumstances and objectives change; and
- Use Pension2 communications and materials about Pension2 investment options to direct the allocation of their contributions among the Pension2 options.

Participants bear the full risk of investment results from the investment options they select. Participants can construct a personalized portfolio aligned with their individual goals and desired risk tolerance. To accomplish this objective, Pension2 offers the following investment choices:

Core Funds

Pension2 provides a core fund line-up that participants can choose from to create an asset allocation that matches their individual circumstances, goals, time horizons and risk tolerance. Education Code section 24950(b)(4) requires that the Pension2 403(b) component make available at least three investment options. The core funds offer a range of investment alternatives with different risk and return characteristics in the asset classes below. The complete list of core investment options, along with associated fees and performance history, is posted on the Pension2 website.

Asset Classes

- Equity (U.S. and Non-U.S.)
- Fixed Income
- Money Market/Stable Value
- Alternative Assets

Easy Choice Portfolios

Pension2 currently offers a set of target date portfolios called Easy Choice. Participants have the choice of three risk options— aggressive, moderate and conservative—for each of the target dates, which are set in 10-year increments. The asset allocation of each Easy Choice portfolio adjusts to be more conservative as time passes and the target dates become nearer. Easy Choice portfolios are constructed using the Pension2 core investment options. Rebalancing Easy Choice portfolios to their asset allocation targets occurs at least annually or as necessary.

Self-Directed Brokerage Window

Pension2 offers a self-directed brokerage window that allows participants to choose from a wider variety of funds than those in the core fund line-up for those participants who desire to build their own portfolios. The investments available through the self-directed brokerage window are not selected, endorsed or monitored by CalSTRS officers or employees nor the Teachers' Retirement Board, and neither is responsible for decisions participants make through the brokerage window.

Financial Engines

Pension2 offers participants assistance with investment and retirement planning advice via two levels of service:

Online Advice – For those who prefer to manager their own retirement account, Online Advice is a web-based service, provided at no additional cost. Participants are provided with a personalized retirement forecast, risk assessments, and specific plan-related savings and fund recommendations.

Professional Management – For those who would prefer to hire a professional to manage their Pension2 account, we offer Professional Management, Participants receive personalized retirement savings and investment strategy, as well as ongoing monitoring and management of their account. Participants pay an additional fee for this service.

PENSION2 ADVISORY COMMITTEE

Purpose

The Pension2 Advisory Committee monitors Pension2 investment options and advises the Chief Investment Officer regarding the committee's recommendations on available investment options and Easy Choice portfolio allocations and glide paths. The committee presents its recommendations to the CIO in writing for approval.

Advisory Committee Members

The voting committee members are:

- Director of CalSTRS - Retirement Readiness, or designee

- Three Defined Contribution Solutions staff appointed by the Director of CalSTRS
Director of Retirement Readiness
- One CalSTRS Investments staff appointed by the CIO

Advisory Committee Structure

The director of Defined Retirement Readiness or designee presides over committee meetings. Five committee members, with at least one of the five being an Investment staff member, constitute a quorum at a committee meeting. If a quorum is not present, informational items may proceed, but no vote shall be taken with regard to action items. Decisions are made by a majority vote. In the event of a tie vote, both options will be presented to the CIO.

Criteria for Recommendation

- The Pension2 Advisory Committee primarily considers the following criteria when determining whether to recommend adding a fund to the core fund line-up:
- Whether the fund would complement the existing core funds by enabling participants to build diverse portfolios.
- Performance relative to the fund's peer group and an appropriate benchmark with a focus on three- and five -year returns.
- Stability in the fund's management team and strategy.
- Participant interest and demand for the fund or the fund's underlying asset class.
- Fund fees in comparison to peers.

Investment Monitoring and Watch List Procedures

The committee monitors investment options to determine whether they are performing at a satisfactory level. If the committee identifies a potential concern based on one or more of the monitoring criteria, an investment option will be placed on the watch list. When the investment option meets the watch list removal criteria that correspond with the reasons it was placed on the watch list, it can be removed from the list. If the concerns associated with the investment option rise to a level that the committee determines it prudent to remove or replace the investment option, it may recommend removal or replacement to the CIO.

Monitoring

When monitoring investment options, the committee considers the following criteria:

Monitoring Criteria	Watch List Removal Criteria
Performance relative to a peer group and benchmark	Improved performance that is again consistent with peer group and benchmark
Strategy changes	Strategy stabilization aligns with Pension2's strategic objectives
Style drift	Style stabilization aligns with Pension2's strategic objectives
Portfolio manager changes	Performance remains consistent with peer group and benchmark
Excessive personnel turnover	Personnel stabilization
Organizational changes	Organizational stabilization
Financial health	Financial stabilization

Mapping

Before an investment option can be removed or replaced, the committee must establish a CIO-approved mapping plan to direct where its assets will be allocated as a result of the removal or replacement. To minimize disruption to participant portfolios, assets will be mapped to investment options closest in capital market exposure and risk/return characteristics to the removed or replaced investment option selected by the committee and approved by the CIO.

Frequency of Review

The Pension2 Advisory Committee meets at least semi-annually, or more frequently as necessary. The committee will review this investment policy statement as necessary and recommend any changes to the CIO.

DUTIES AND RESPONSIBILITIES

Teachers' Retirement Board

The Teachers' Retirement Board and CalSTRS officers and employees (staff) to whom Board responsibilities have been delegated shall discharge their Pension2 program duties as fiduciaries and solely in the interests of the participants and beneficiaries of the 403(b) program and 457(b) program, as applicable.

The Board's authority over the Pension2 program shall be exercised for the exclusive purpose of providing benefits to participants and beneficiaries of the 403(b) program and 457(b) program, as applicable, and defraying the reasonable expenses of program administration. To that end, the Board and staff shall select, monitor and oversee a diverse menu of investment options for the 403(b) program and the 457(b) program, as applicable, sufficient to allow participants and beneficiaries to achieve a portfolio of individual account investments with aggregate risk and return characteristics at any point within the range appropriate for long-term retirement savings.

With respect to investment option selection, oversight and monitoring responsibilities, the Board and CalSTRS staff shall act with the care, skill prudence and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims.

Chief Investment Officer

The Chief Executive Officer has delegated responsibility for Pension2 investment decisions to the CIO. This responsibility includes the selection of the investment options, shifts in options, and the default investment option.

Benefits & Services Executive Officer

The Chief Executive Officer has delegated non-investment programmatic decisions to the Benefits & Services Executive Officer.

Pension2 Advisory Committee

The CalSTRS Pension2 Advisory Committee is responsible for monitoring the Pension2 program. The committee's investment option recommendations are made to the CIO and non-investment related recommendations are made to the Benefits & Services Executive Officer. The committee monitors or reviews key areas, including the:

- Core fund line-up.
- Easy Choice target date portfolios' allocations.
- Default investment option. The default option will be selected to manage investment risk to the participant by providing a high level of stability in value, such as a money market fund or a fixed annuity.
- Compliance with the Pension2 investment policy statement.

Program Recordkeeper

The Pension2 program record keeper provides CalSTRS with third-party administrator compliance services. The recordkeeper is selected through a competitive bidding process. The Teachers' Retirement Board is responsible for approving the contract with the recordkeeper.

Employers

Employers are responsible for all contribution remittances and other payroll-related tasks. Each local school district employer may be subject to fiduciary duty under state or federal law and should consult legal counsel regarding this possibility. Employers are also responsible for choosing among available plan features when setting up a CalSTRS Pension2® 457(b) plan.

If an employer that has assumed responsibility for selecting and monitoring available investment

options pursuant to its investment policy statement, that employer has assumed fiduciary duty with specific regard to its 457(b) plan and the related portions of this investment policy statement will not apply.

Participants

Pension2 participants are responsible for making their own investment decisions and for bearing the risk of the investments they select. Participants are also responsible for reallocating assets according to their investment horizon, personal circumstances and risk tolerance. For example, participants near retirement may have a significantly different investment horizon and risk tolerance than new participants who recently began employment.

When evaluating investment performance, participants should follow the Pension2 Advisory Committee's investing principle of patience and a long-term perspective, in the absence of specific circumstances requiring immediate action. Participants who select the self-directed brokerage window are responsible for researching, selecting and monitoring investment options they deem suitable to meet their retirement goals.

Consultants

The committee may retain consultants to assist in the design, implementation of the programs and consultants to assist in monitoring of the investment options for the Pension2 program. The duties and responsibilities of consultants retained may include, but are not limited to:

- Program structure, design, and business strategy.
- Providing investment recommendations.
- Providing program-related investment advice to the committee.
- Conducting searches for new program investment options.
- Attending committee meetings.

REPORTING

The CalSTRS Pension2 Advisory Committee will conduct a review of this investment policy statement and the CIO will recommend changes to the Investment Committee as necessary. The committee shall report any changes to the core fund line-up and the performance of the Pension2 program and investment options to the Investment Committee semiannually. Ad hoc or committee items may be scheduled as necessary to either the Benefits & Services Committee for administrative matters or the Investment Committee for Investment matters.

Benchmarks

Easy Choice

The Easy Choice portfolios are benchmarked against the [Morningstar Lifetime](#) target date funds.

Core Funds

Individual investment options will be benchmarked against an applicable published index.

COMMUNICATION AND EDUCATION

The CalSTRS Pension2 Advisory Committee strives to ensure that plan participants are provided with sufficient communication and education to assist in making informed investment and retirement planning choices, including but not limited to:

- Periodic enrollment and investment education through one or more of the following: in-person consultation, phone consultation, conferences, benefits fairs, online retirement calculators, email, and written materials.
- General information regarding investment risk, inflation, potential taxation impact, investment earnings, diversification, and asset classes.
- Proactive and prompt communication as improvements and changes are made to the plan.

Initial Adoption September 2013

Revised February 2015

Revised governance structure July 2017

Q. Inflation Sensitive Investment Policy

EXECUTIVE SUMMARY

The purpose of the Inflation Sensitive Policy (Policy) is to expand the opportunity set beyond the current portfolio constituents available under the current [Investment Policy and Management Plan](#) (IPMP, pg. A-15). This Policy includes investments and strategies not covered by the Infrastructure Policy. However, this Policy incorporates the [Infrastructure Policy](#) by reference and recognizes it as an integral component of the Inflation Sensitive asset class structure.

In accordance with the CalSTRS Investment Policy and Management Plan, the California State Teachers' Retirement System Board (Board) has established an Inflation Sensitive Portfolio. The primary objective for the Inflation Sensitive Portfolio (Portfolio) is to invest in strategies that provide further diversification of CalSTRS overall investment Portfolio. The secondary objective of the Inflation Sensitive Portfolio is to construct a portfolio that will invest in strategies that provide protection against inflation and generate a long term return which exceeds both inflation and the performance benchmark while taking reasonable and prudent risk.

CalSTRS Inflation Sensitive assets are to be invested, administered, and managed in a prudent manner for the sole benefit of its participants and beneficiaries, in accordance with the California Constitution, Teachers' Retirement Law, and other applicable statutes. No investment instrument or activity prohibited by the IPMP shall be authorized for the Inflation Sensitive Portfolio.

The Policy ensures that investors, managers, consultants, advisors, or other participants selected by CalSTRS take prudent and careful action while managing the Portfolio. The purchase, management, and sale of all Portfolio products are performed by external and/or internal professionals (managers) who are monitored and evaluated by internal investment officers, a Portfolio consultant, and/or independent fiduciaries.

CalSTRS believes that environmental, social and governance (ESG) issues can affect the performance of our investments. As a result, CalSTRS Risk Factors have been developed as a tool that both internal and external investment managers are expected to use to assess the impact of ESG risk when making an investment on behalf of CalSTRS. CalSTRS ESG Risk Factors can be found in the most current IPMP and may be viewed by accessing www.calstrs.com/investment-policies.

The internal investment officers and independent fiduciaries operate under the direction of the Chief Investment Officer (CIO). Review of the Portfolio falls under the general consultant (Consultant), who reports directly to the Investment Committee. If a specialty asset class consultant is retained, that consultant will report directly to the Investment Committee.

Policies approved by the CalSTRS' Investment Committee cannot be altered without explicit direction from the Board.

Investment Objective

The purpose of the Portfolio is to provide diversification to the CalSTRS portfolio, lower the macroeconomic risks that pervade other major asset classes, and positively capture long-term changes in inflation.

Inflation is defined as a sustained and persistent increase in the general price level of goods and services leading to a subsequent reduction in individual and group purchasing power. Inflation can be driven by an increase in the overall money supply or disequilibrium between supply and demand, in any number of markets, that ripple across the economy. The strategic objective of the Portfolio is to:

- A. Provide inflation protection, diversification and inflation linked returns for the long-term.
- B. To lower CalSTRS' portfolio volatility through a combination of strategies and sector allocations less correlated with long-term growth.
- C. Pursue investments which provide cash flows correlated with inflationary assets that contain adjustable contractual or non-contractual payment streams that will benefit from inflation over the long-term.
- D. Pursue investments expected to benefit from inflation and increase in market value over the long term.

The Portfolio will seek to improve the diversification of the total investment portfolio and enhance its risk-adjusted total return. The assets shall be managed to generate current income and provide a modest level of capital appreciation.

Performance Objectives

The Portfolio is to be structured to achieve a long term total return that is consistent with its policy benchmarks. Each strategy within the Portfolio will have its own specific performance benchmark. Therefore, the portfolio will have a blended weighting comprised of the strategies undertaken within the Portfolio. A blended and weighted benchmark will be the end result. The long term objective of the Portfolio is to exceed US CPI by a reasonable level over a market cycle of three to five years.

Policy Benchmark

The current policy benchmark is a weighted blend of the Bloomberg Barclays U.S. Government Inflation Linked Bond Index, Alerian MLP daily Index, Bloomberg Commodity Index and a CPI +4% (quarterly lagged index). As new strategies are added, the future benchmark shall be a blended performance benchmark that will comprise the weightings for each of the strategies undertaken in the Inflation Sensitive Portfolio multiplied by their respective benchmarks. The Policy will be updated accordingly through a schedule set forth by the Board.

Portfolio Structure

The Inflation Sensitive Portfolio is a unique hybrid class of multiple asset types that jointly seek to produce a stable return and one that exceeds the specified performance objective. To achieve the stated performance objective, the Portfolio will invest in a diversified portfolio of strategies with a mixture of both internal and external management. Diversification within the Portfolio will be a critical aspect of risk-control. Investments will be aggregated, assessed, and monitored so as to control for unintended biases.

Inflation Sensitive assets will consist of two major components:

- A. Public – Inflation Sensitive – will include strategies that utilize public securities that have a linkage to changes in inflation and are bought and sold in widely recognized and liquid markets and can include:
 1. Government Inflation Linked Bonds – these strategies invest in US Treasury Inflation Linked securities and/or Global Sovereign Inflation Linked Securities.
 2. Inflation Linked Corporate debt (investment grade) - short-term fixed and floating rate debt and loan securities – these securities may take the form of short term corporate securities that have investment grade ratings. Investment grade ratings are those securities rated Baa3/BBB-/BBB- or higher using two of the three equivalent ratings of Moody's, Standard and Poor's Ratings Service, or Fitch Ratings.
 3. Inflation Linked Corporate debt (high yield) - short-term fixed and floating rate debt and loan securities – these securities may take the form of short term corporate debt in which the investor has first or second lien coverage and have below investment grade credit ratings. Below investment grade ratings are those securities rated Ba1/BB+/BB+ or lower using two of the three equivalent ratings of Moody's, Standard and Poor's Rating Service, or Fitch Ratings.
 4. Commodities and commodity based strategies determined to be aligned with CalSTRS inflation sensitive mandate.
 5. Equity securities and equity based strategies determined to be aligned with CalSTRS inflation sensitive mandate (e.g., MLPs).
- B. Private – Inflation Sensitive – will include strategies that utilize private securities that have a linkage to changes in inflation but are more illiquid and can include:
 1. Infrastructure related equity positions and/or debt securities – these strategies are within the Infrastructure Portfolio and are defined in the [Infrastructure Portfolio Policy](#).
 2. Other security types and strategies may include, but are not limited to: timber, agricultural, energy, commodities or other strategies uncovered as part of the Inflation Sensitive unit's normal course of business, strategies spun out of the

Innovation and Risk unit, or strategies presented to other units of the Investment Branch that might not fit a particular unit's mandate but might more closely fit the Inflation Sensitive unit's objectives.

Allocation Ranges

Allocation and target ranges for the Inflation Sensitive Portfolio between its two major components are:

Component	Lower Limit	Upper Limit
• Public - Inflation Sensitive	20%	80%
• Private – Inflation Sensitive	20%	80%

Other Strategies

Other securities and or strategies that are deemed by the Director of Inflation Sensitive, the Chief Investment Officer, Deputy Chief Investment Officer, and consultant (e.g., general or specialized consultant - if deemed necessary) that are expected to provide protection against the risks associated with inflation may also be considered under this Policy. Such investments may include, but are not limited to, public and private equity/debt, preferred public and private equity/debt and publicly listed equity with an inflation protection emphasis. The Inflation Sensitive staff may select and utilize: Co-Investments, Separate Accounts, Joint Ventures, Commingled Funds, and appropriate Direct Investments. These vehicles will be selected to provide for appropriate return and control, the highest level of accountability on the part of management, and alignment of interests with CalSTRS, all while mitigating both risk and costs.

Risk Management

- A. Diversification - plays a critical role in a portfolio in order to control risk and maximize returns. The Portfolio is expected to diversify among and across various investment types and structures in order to insure liquidity, maximize income and insure modest capital appreciation. Minimum and maximum ranges with respect to investment sectors, credit exposures, duration, and tracking error will be established, when applicable, to those parts of the Portfolio that have significant debt exposures. The Director of Inflation Sensitive will work with managers and develop guidelines to insure that portfolios and strategies are broadly diversified within the best practices of any particular strategy adopted.
- B. Derivatives - are permitted to assist in the efficient management of risk, asset allocation or market exposures in the Portfolio. Such instruments can include futures, options, swap agreements, or forwards as well as strategies that may employ derivatives as part of their

normal course of management. The implementation of any derivative strategy will be thoroughly reviewed by the Director of Inflation Sensitive, Deputy Chief Investment Officer, the Director of Fixed Income, the Chief Investment Officer, or designee. Limitations concerning aggregate risk control and counterparty exposures will be documented in the investment guidelines and not conflict with the IPMP.

- C. Authorized traders – Authorization letters which specify who may transact business for the Portfolio shall be sent a copy of the most recent investment resolution at the time the account is opened and then periodically to all broker/dealers with whom CalSTRS conducts business. Whenever a change in an authorized trader(s) takes place, the broker/dealer shall be notified in writing or via e-mail within 24 hours in the event of a termination, or as soon as possible in the event of a newly authorized trader(s).
- D. Trading parameters – the following trading parameters are non-cumulative and apply with respect to daily trading activity within any internally managed portion of the Portfolio. For transition management portfolios, tighter trading parameters may be applied:

Investment Officer I	up to 2% of related internally managed portfolio
Investment Officer II	up to 4% of related internally managed portfolio
Investment Officer III	up to 6% of related internally managed portfolio
Associate Portfolio Manager	up to 8% of related internally managed portfolio
Portfolio Manager	up to 10% of related internally managed portfolio
Director of Inflation Sensitive	up to 5% of total Inflation Sensitive Portfolio
Deputy Chief Investment Officer	up to 10% of total Inflation Sensitive Portfolio
Chief Investment Officer	up to 10% of total Inflation Sensitive Portfolio

- E. Wire and Trade Processing – All transactions relating to internally managed Inflation Sensitive Portfolios shall be traded within the parameters noted above and approved within the confines of guidelines that require, at a minimum, a dual release for all trades. It should be noted that the staff person releasing the trade to the custodian must be from the Investment Operations Unit to ensure a proper separation of duties.
- F. Cash Transfer Limitations – the following limits are non-cumulative and apply with respect to Inflation Sensitive investment officers signing for daily cash disbursements for investment portfolio transactions:

Investment Officer I	\$20 million
Investment Officer II	\$30 million
Investment Officer III	\$50 million
Associate Portfolio Manager	\$65 million
Portfolio Manager	\$75 million
Director of Inflation Sensitive	\$200 million
Deputy Chief Investment Officer	\$500 million
Chief Investment Officer	\$500 million

As investments are added to the Inflation Sensitive Portfolio and the Portfolio matures, the daily cash transfer limits will be reviewed, and a daily transfer limit based on a percentage of the Portfolio will be considered.

Inflation Sensitive Internal/External Management

The Inflation Sensitive Portfolio will be managed through a combination of internal staff and external managers. Within the boundaries established in the procedures, the decision to hire an external manager or utilize internal investment staff for an investment strategy is made by applying a Board-approved criteria matrix (Exhibit 2) to evaluate a variety of factors including, but not limited to, cost effectiveness/control, market transparency and liquidity, market efficiency, active risk, and infrastructure/resource requirements. CalSTRS uses active external management as a tool to implement its inflation sensitive strategies and to allocate risk where it believes there is the greatest opportunity to enhance returns commensurate with the associated risk undertaken.

Within the boundaries and ranges established by this Investment Policy, staff is responsible for the selection, allocation, and oversight of external managers hired to implement an Inflation Sensitive strategy. Manager guidelines, objectives, benchmark selection, portfolio composition, and constraints are to be administered and monitored across all inflation sensitive portfolios.

Portfolio Leverage

CalSTRS will employ leverage in the Portfolio as found within a Fund, Separate Accounts/ Co-invest, Joint Ventures, and applicable Direct Investments. Such leverage may exist at the portfolio, manager or investment level. Since leverage also increases the volatility of the Portfolio, careful consideration will be given to the impact of leverage on investment and portfolio risk. In addition, limitations on the amount of leverage at the individual asset or investment entity level, as well as debt service coverage requirements, will be negotiated or arranged wherever possible.

Leverage at the aggregate Inflation Sensitive portfolio level shall be monitored with a long-term goal of maintaining it at no higher than 50 percent (50%) LTV (i.e., loan-to-value). To preserve the character of the asset class within CalSTRS' total Fund portfolio, the aggregate asset class shall not be overleveraged. This shall be measured quarterly by comparing the principal amount of debt secured by Private Inflation Sensitive investments in the Portfolio to the aggregate gross fair market value. To the extent that leverage exceeds the maximum, CalSTRS shall make reasonable efforts to reduce the leverage ratio to below the maximum allowable, within a reasonable time frame.

Exit Strategies

Investments in the Inflation Sensitive Portfolio should have clearly articulated and viable exit strategies through which assets can be disposed of or liquidated upon termination of the investment manager. The Portfolio is expected to have a combination of liquid and illiquid assets. Some fund structures may have liquidation mechanisms and others may not have clearly defined liquidation events. The Portfolio will seek to diversify among the various structures available based on a careful balance between the need for liquidity, the potential negative effects of inflation and structures emphasizing both income and modest capital appreciation.

Annual Business Plan

The Portfolio will be managed according to an annual business plan.

Monitoring and Reporting

The following reports will be prepared and presented to the Board, unless otherwise stated, in order to facilitate visibility of compliance monitoring and reporting according to this document:

- A. Inflation Sensitive Semi-Annual Report – prepared by staff.
- B. Performance Report – prepared by master custodian/consultant (semi-annually).
- C. Investment Manager Ratings Report – prepared by staff (semi-annually).
- D. Business Plan – prepared by staff (annually).

Policy Monitoring and Modification

The general consultant or specialized Inflation Sensitive consultant, if retained, shall monitor the investment process for compliance with this policy and report to the CalSTRS Investment Committee on a semi-annual basis.

This Inflation Sensitive Investment Policy shall be reviewed periodically to determine if modifications are necessary or desirable. Any changes shall be subject to the approval of the Investment Committee.

Adopted by the Teachers' Retirement Board on September 2, 2015
Revised to define APM trading and cash transfer limits and reflect new reporting frequency on
April 5, 2017
Revised to give the ability to adjust the benchmark to reflect the dynamic weighting of assets that
will be incorporated into the Inflation Sensitive Portfolio on July 12, 2017

R. Risk Mitigating Strategies Policy

EXECUTIVE SUMMARY

In accordance with the CalSTRS Investment Policy and Management Plan, the Teachers' Retirement Board has established a Risk Mitigating Strategies class. The objective for the Risk Mitigating Strategies (RMS) class is to invest in strategies that provide further diversification of CalSTRS overall investment portfolio. The goal of the Risk Mitigating Strategies class is to construct a portfolio that will invest in strategies that primarily provide protection against equity market downturns.

The Risk Mitigating Strategies class consists of: (1) long duration U.S. Treasuries, (2) Trend Following, (3) Global Macro, (4) Systematic Risk Premia, and other strategies to be identified in the future. The purpose of the Risk Mitigating Strategies Policy (Policy) is to expand the investment opportunity set beyond the portfolio constituents identified in the current Investment Policy and Management Plan (IPMP).

CalSTRS' Risk Mitigating Strategies assets are to be invested, administered and managed in a prudent manner for the sole benefit of its participants and beneficiaries in accordance with the California Constitution, Teachers' Retirement Law, and other applicable statutes. No investment instrument or activity prohibited by the IPMP shall be authorized for Risk Mitigating Strategies.

The policy ensures that investors, managers, consultants, advisors, or other participants selected by CalSTRS take prudent and careful action while managing the RMS Portfolio (Portfolio). The purchase, management, and sale of all Portfolio products are performed by external and/or internal professionals (managers) who are monitored and evaluated by internal investment officers, a Portfolio consultant, and/or independent fiduciaries.

CalSTRS believes that environmental, social and governance (ESG) issues can affect the performance of our investments. As a result, CalSTRS 21 Risk Factors have been developed as a tool that both internal and external investment managers are expected to use to assess the impact of ESG risk when making an investment on behalf of CalSTRS. CalSTRS ESG Risk Factors can be found in the most current IPMP and may be viewed by accessing www.calstrs.com/investment-policies.

The internal investment officers and independent fiduciaries operate under the direction of the Chief Investment Officer (CIO). Review of the Portfolio falls under the general consultant (Consultant), who reports directly to the Investment Committee. If a specialty asset class consultant is retained, that consultant will report directly to the Investment Committee.

Policies approved by the CalSTRS' Investment Committee cannot be altered without explicit direction from the board.

POLICY

This document outlines the policy for the management of CalSTRS' RMS class. These policies are designed to set the boundaries for oversight and management of the Portfolio, while allowing sufficient flexibility in the management process to manage risk and capture investment opportunities.

Policies for the management of the RMS portfolio (Portfolio) are listed below:

1. The Portfolio's assets are to be invested in a prudent manner for the sole benefit of its participants and beneficiaries, in accordance with applicable portions of the California Teachers' Retirement Law.
2. The Risk Mitigating Strategies class will invest in a number of investment strategies including long duration U.S. Treasuries, Trend following, Global Macro, Systematic Risk Premia, and other types of strategies. The Chief Investment Officer (CIO) with concurrence of the General Consultant approves any allocation to a new strategy. The target allocation and ranges for the Risk Mitigating Strategies sub-strategies are as follows:

Strategy	Target Weight	Lower Limit	Upper Limit
Long duration U.S. Treasury	40%	30%	50%
Trend Following	45%	35%	55%
Global Macro	10%	0%	20%
Systematic Risk Premia	5%	0%	15%
Other Strategies	0%	0%	10%

The table above depicts the targets and ranges for the various portfolio strategies over the long-term. However, in response to changing market conditions or other relevant factors, the actual allocation may vary within the recommended ranges and may tilt defensively or aggressively toward the extreme ends of the ranges. A range has been set for each segment to provide capacity if the portfolio falls out of balance due to specific opportunities to tactically over and/or underweight a segment based on compelling opportunities or fundamental issues.

From time to time, the actual allocations to the portfolio segments may fall outside the recommended ranges. In these instances, adjustments from the actual to the prescribed allocation range shall be implemented over a reasonable time frame with ample consideration given to preserving investment returns to CalSTRS.

3. Each strategy will have its own specific performance metric. The Risk Mitigating Strategies class shall have a blended performance benchmark comprised of the target weightings for each of the strategies utilized in the portfolio multiplied by their respective benchmarks. As the class is implemented, target weights may not be achievable and the benchmark will be dynamic until full implementation of the class as determined by the CIO.

Strategy	Benchmark
Long-duration U.S. Treasury	Barclays U.S. Treasury 20+ Year Total Return Index
Trend Following	SG Trend Index
Global Macro	HFRI Macro: Discretionary Thematic Index
Systematic Risk Premia	Eurekahedge Multi-Factor Risk Premia Index

4. The Portfolio will not hold any securities prohibited by the Investment Resolution.
5. To achieve the stated performance objective, the Portfolio will invest in a diversified portfolio of strategies. Staff will select appropriate investment strategies with structural aspects that provide improved diversification and potential for protection in down markets.
6. CalSTRS may enter into discretionary separate account relationships with investment funds/managers, subject to pre-approved investment guidelines. The CIO must approve any deviations from the approved guidelines. For this reason, investments shall be structured to facilitate alignment of interests between managers and CalSTRS, manager accountability, investment monitoring and liquidity.
7. The assets under management (AUM) in the Risk Mitigating Strategies class shall target over the long-term 9 percent of the CalSTRS' total fund market value.
8. All investment products will be carefully evaluated to determine the expected benefits to the RMS class. All investment products will be approved by investment staff and a consultant (e.g., general or specialized independent consultant, if required). All investments are subject to appropriate due diligence as defined in the CalSTRS' Risk Mitigating Strategies class guidelines.
9. CalSTRS' investment personnel have authority to manage the RMS class. If prudent, CalSTRS may elect to manage a strategy internally. Any internally managed strategy will be approved by the Chief Investment Office and General Consultant. The delegated non-cumulative daily limits for approval of commitment, internal management trading and/or cash transfers to a strategy are designated below:

Investment Officer I	0.0025% of Total Fund
Investment Officer II	0.01% of Total Fund
Investment Officer III	0.05% of Total Fund
Associate Portfolio Manager	0.10% of Total Fund
Portfolio Manager	0.15% of Total Fund
Director of Innovation & Risk	0.25% of Total Fund
Deputy Chief Investment Officer	0.50% of Total Fund
Chief Investment Officer	0.50% of Total Fund

10. CalSTRS may employ leverage in the Portfolio in order to enhance investment returns. Such leverage may exist at the portfolio, manager or investment level. Because leverage increases the volatility of the Portfolio, careful consideration will be given to the impact of leverage on investment and portfolio risk. In addition, limitations on the amount of leverage at the individual asset or investment entity level will be negotiated or arranged wherever possible.
11. Investments in the RMS class should have clearly articulated and viable exit strategies through which assets can be disposed of or liquidated upon termination of the investment manager.
12. The CIO and/or Deputy CIO shall monitor the implementation of the RMS class in compliance with investment policies. A report to the CalSTRS' Board shall be made annually or as otherwise requested.

*Policy for Risk Mitigating Strategies Class First Reading and Adoption February 3, 2016
Revised to define APM trading limits on April 5, 2017*

GLOSSARY

BENCHMARK – A standard against which the performance of a security, mutual fund or investment manager can be measured. Generally, broad market and market-segment stock and bond indexes are used for this purpose.

DISCRETION – The level of authority given to an investment manager over the investment and management of a client’s capital once that capital is allocated to the investment manager.

DIVERSIFICATION – Investing in a wide range of securities/or asset classes in order to reduce financial risk.

DUE DILIGENCE – The process of investigating, evaluating and analyzing a potential investment’s characteristics, investment philosophy and terms and conditions.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) – Topics such as climate change, energy use, political contributions, labor and human rights.

INDEX – A defined representative collection of securities used to measure the change in value of the securities market on a monthly basis.

INVESTMENT GUIDELINES – This is a document that establishes the parameters through which the investment manager will invest CalSTRS’ assets. These guidelines specify valid securities for the portfolio, the return expected from the manager, how the manager will be evaluated and the period over which the manager will be evaluated.

INVESTMENT MANAGER – A company that, by contractual agreement, provides infrastructure investment opportunities and/or property asset management services.

INVESTMENT OFFICER – Any one of the in-house investment professionals in the CalSTRS Investment unit.

INVESTMENT POLICY AND MANAGEMENT PLAN – This document outlines CalSTRS’ general and financial objectives including specific investment strategy. This document is the result of studies that include the assets and liabilities for the System.

LEVERAGE – The use of borrowed funds to increase purchasing power and, ideally, to increase the profitability of an investment.

LIQUIDITY – Refers to availability of a stock or bond to be traded. An issue that is readily available is considered to be liquid, an issue that does not trade very often is deemed illiquid.

PERFORMANCE BENCHMARK – Refers to each individual external manager’s designated benchmark (e.g., Russell 1000) and their performance target (e.g., Russell 1000 + 1½ percent).

PORTFOLIO – A collection of stocks, bonds, or money market securities owned by an investor and segmented by a predefined method.

SEPARATE ACCOUNT – An investment fund managed for one or two investors rather than many with a specialized mandate.

UNITED STATES TREASURY SECURITIES – Debt issues of the U.S. Government, such as Treasury bills, notes and bonds.

VOLATILITY -The relative rate at which the price of a security moves up and down, found by calculating the annualized standard deviation of daily change in price.

S. Special Mandate Policy

SPECIAL MANDATE POLICY

As set forth in the California Constitution, Article 16, Section 17, and the California Education Code, Section 22250, the Teachers' Retirement Board, its Investment Committee, and staff have fiduciary duties with respect to the system and the plan. These duties include duties of loyalty and prudence to invest "with the care, skill, prudence, and diligence under the circumstances then prevailing that a prudent person acting in a like capacity and familiar with these matters would use in the conduct of an enterprise of a like character and with like aims." (Ed. Code, sec. 22250(b).)

This policy sets forth CalSTRS' policy and procedures for considering special mandates and related investment strategies.

For purposes of this Policy, "special mandates" are defined as discrete investment strategies (other than divestments which are covered by a separate Board policy) suggested by Board Members that include, but are not limited to: environmental; social; governance (ESG); in-State investments; or other factors that are expected to have a positive or neutral impact on the economic performance of the fund over the long term.

PROCEDURES

At any Investment Committee meeting, during the Chief Investment Officer report or during the review of the next meeting agenda, a member of the board may request an item be added for the Investment Committee to consider a special mandate to be incorporated into the investment portfolio. If a majority of the Investment Committee concurs, the chair will identify the proposal as a "special mandate subject to this Policy" and initiate the following procedures:

1) At the next Investment Committee meeting, in Open Session, a special mandate action item will be added to consider amending the Investment Committee current or future Fiscal Year work plan. The theory, including any anticipated economic justification, for why the special mandate can be expected to have a positive or neutral impact on the economic performance of the fund over the long term must be articulated at the meeting to help inform the Investment Committee's consideration of amending the work plan. If added to the work plan by a majority vote of the Investment Committee, staff and the investment consultant(s) will research and evaluate the special mandate and report as follows. The report will be brought to the Investment Committee for final approval of the special mandate.

2) The Investment Committee will receive a written evaluation of the proposed special mandate including at least the following:

- (a) A detailed review and affirmation (or disaffirmation) of the theory and economic justification for why the proposed special mandate satisfies the definition of a special mandate;
- (b) An analysis of the risk, return, and potential costs of the proposed special mandate;
- (c) A forecast of the impact of including the proposed special mandate on the applicable asset class and sub-asset class structure, within the overall investment portfolio;

- (d) A determination whether there are elements of the special mandate that could be revised or eliminated to improve the likely impact of the special mandate on the economic performance of the Fund;
- (e) A statement about the proposed special mandate's consistency with the strategic policy, the Investment Policy and Management Plan, and Investment Beliefs (when adopted);
- (f) A proposed source of funding for the proposed special mandate and how that impacts the asset class and overall portfolio.

In addition, the Investment Committee may also seek the input of legal counsel and external experts or research firms (as needed) to better understand and evaluate the proposed special mandate.

3) Based upon the analysis, staff and the investment consultant(s) will present their findings to the Investment Committee and make a recommendation to pursue the proposed special mandate; make a recommendation not to pursue the proposed special mandate; or, recommend a modification to the proposed mandate for the Investment Committee's consideration. Any recommendation to pursue a proposed special mandate must include a recommendation, the source of the funds to be allocated to the special mandate, as recommended by staff, and the specific performance objective/ benchmark against which to measure the success of the special mandate.

4) If approved by the Investment Committee, the special mandate will be integrated into the investment portfolio with a capital allocation and other terms as approved by to the Investment Committee, together with any additional resources and staffing necessary to carry out the mandate. The Investment Committee must also approve the appropriate benchmark to measure the investment performance and clarify the overall goal of the any ancillary benefits of each specific mandate, if proposed.

REPORTING

Annually after the fiscal year end, the Chief Investment Officer will prepare a streamlined "Ancillary - Special Mandates" report that shows the risk and cost-adjusted performance of all the various special mandates relative to their respective asset class or sub-asset class benchmarks as identified under item 4 above.

From the funding date, each individual special mandate will follow reporting cycle:

- Every three years, on the anniversary of the initial funding of the mandate, the general consultant will prepare and present a review of the special mandate, including an updated review of the original expected economic risks and opportunities and any material developments since approval of the mandate.
- Every six years, on the anniversary of the initial funding of the mandate, the Investment Committee, as part of a fiduciary review, must affirmatively vote to continue the special mandate on terms satisfactory to the Investment Committee under the circumstances then

prevailing. The Investment Committee may also terminate or revise the mandate at any time.

CURRENT SPECIAL MANDATES

The following are the special mandates that have been approved or directed by the Investment Committee. These mandates shall be subject to this policy and their “initial funding date” for purposes of this Policy shall be deemed the date on which this policy is adopted.

Special Mandate	Asset Class	Allocation	Date	Funding Date
Member Home Loan Program	Fixed Income, and now Absolute Return	Open ended	1984	April 1987
Underserved Urban & Rural California	A. Private Equity	\$200 million ¹	Feb 2002	March 2003
	B. Real Estate			January 2004
New & Next Generation Managers	A. Private Equity	\$150 Million ²	July 2002	May 2005
	B. Real Estate			August 2006
Developing Manager Program	Global Equity	\$600 million ³	Mar 2003	August 2004
Corporate Governance Activists	Global Equity / Corporate Governance	\$700 million ⁴	Mar 2003	July 2004
Energy Star Program	Real Estate – office properties	No set allocation	Apr 2004	January 2005
Clean Tech Investments	Private Equity	\$100 mil - VC \$400 mil -Energy related	Nov 2004	May 2005

Initially developed and approved: June 2016

¹ The combination of Underserved Urban and Rural California and New & Next Generation intended to be approximately 10 percent of the Private Equity portfolio.

³ Set at five percent of U.S. equity or 12.5 percent of the active U.S. equity management.

⁴ Set initially at 5 percent of U.S. equity, but also included Non-U.S. mandates.

Appendix I

Delegation of Authority
to
Chief Executive Officer
By the California State Teachers' Retirement Board

WHEREAS, it is the duty of the Teachers' Retirement Board to administer the System faithfully without prejudice and consistent with the law and Board policy;

WHEREAS, the Teachers' Retirement Board has a fiduciary duty with respect to the interests of the members and beneficiaries of the System;

WHEREAS, management of the System is vested by law in the Teachers' Retirement Board;

WHEREAS, the Teachers' Retirement Board has exclusive control of the investment of the Teachers' Retirement Fund;

WHEREAS, the Teachers' Retirement Board may delegate authority to the Chief Executive Officer to perform any act within the power of the Board itself to perform. Unless the delegation provides that the Chief Executive Officer has the authority to act finally, any such acts shall be reported to the Board at its next regular meeting and shall be subject to review, reversal or ratification by the Board (Ed. Code, sec. 22208, 5 Cal. Code Regs., tit. 5, sec. 20520);

WHEREAS, the Teachers' Retirement Board desires to restate the delegation to the Chief Executive Officer. Now, therefore, be it

RESOLVED, that the Teachers' Retirement Board does hereby delegate to the Chief Executive Officer authority to act as follows:

The management of the California State Teachers' Retirement System is vested in the Chief Executive Officer who shall be the executive and administrative head of the System. The Chief Executive Officer shall operate the System within the framework established by the Constitution, laws, and in accordance with rules and policies adopted by the Teachers' Retirement Board. The Chief Executive Officer shall act as advisor to the Board on all matters pertaining to the System, act as liaison between the Board, members, member organizations, employers, employer organizations, State departments and agencies, the Legislature, and shall also act as Secretary of the Board. Notwithstanding this section, the Chief Executive Officer has the duty to bring to the attention of the Board all matters which are sensitive in nature or have a significant policy impact.

Administrative Duties and Responsibilities

In the administration of the System, the Chief Executive Officer has the duty and the authority to:

1. Present recommendations to the Teachers' Retirement Board (Board) with respect to policies, rules and regulations for the purpose of carrying out the provisions of the laws applicable to the System;
2. Submit to the Board reports, resolutions and procedures, and make recommendations for legislative action on changes in the programs and the laws being administered;
3. Appear before legislative committees and address other groups regarding the provisions of the retirement laws, operations of the System and its programs, and positions taken by the Board on proposed laws and other issues;
4. Determine the amount of and make timely payment of annuities, allowances, and refunds to members, former members and their survivors who are the beneficiaries of the System, all in accordance with governing laws; this includes the authority to adjust any benefit payments and to collect overpayments of benefits pursuant to and in accordance with the law and Board policy;
5. Negotiate, enter into, amend and terminate contracts for goods and services.
6. Submit to the Board for its approval an annual operations budget that is appropriate to the fulfillment of CalSTRS' mission and subsequently present it to the Department of Finance and the Legislature for inclusion in the State's annual budget in accordance with the Board's constitutional authority. Thereafter, the Chief Executive Officer is responsible for administering CalSTRS operations within authorized budget resources;
7. Prepare and submit to the Board the Comprehensive Annual Financial Report, which covers the operations of the System for the preceding fiscal year including investment results, and thereafter send copies of the report to the Controller, the Governor, the Legislature and any other persons/entities as appropriate;
8. Maintain membership and participate in the proceedings of nationally recognized organizations in the fields of public retirement administration, investments, and other disciplines as appropriate for the purpose of keeping abreast with the latest developments applicable to public pension plan administration and to further the interests of the California State Teachers' Retirement System; and
9. In consultation with the Board chair, act as the prime spokesperson for the System to the public, the press and the Legislature.

Authority and Duties

The Chief Executive has the authority to act finally with respect to the following matters:

- a. Planning, organizing and directing the work of the System as deemed necessary to fulfill the functions thereof;
- b. Negotiating, entering into, amending and terminating consulting contracts of a non-investment nature as may be necessary for the administration of the System. In accordance with this policy, and corresponding provisions of the Board Policy Manual, the CEO is delegated authority to enter into contracts that do not exceed \$1,000,000 in cumulative value and sole source contracts that do not exceed \$100,000 in cumulative value. Any contract or purchase which exceeds these values must be approved by the Board itself. The CEO is delegated additional authority to approve up to an additional fifteen percent (15%) not to exceed \$1,000,000 in cumulative value on a contract previously approved by the Board;
- c. Negotiating, entering into, amending and terminating contracts for investment management, advice, consulting, and legal counsel and authorizing expenditures for such investment services to be paid out of the continuous appropriation;
- d. Execute, on the recommendation of the Chief Investment Officer, all documents or authorize the issuance of instructions, both when the System is acting directly and when the System is acting in its capacity as a constituent of an entity in which the System holds an interest, necessary to purchase, sell, convey, assign, incur debt, encumber assets or otherwise manage investments and assets of the System including, but not limited to, those involving real estate, mortgages, equities, fixed income, alternative investments, and special situations, including investments related to the Credit Enhancement Program, in compliance with policy guidelines adopted by the Board or Investment Committee, including authorized investment delegation levels. A copy of this Delegation of Authority and the most current list of discretion levels delegated to the Chief Investment Officer and investment staff shall be maintained in the Board Policy Manual;
- e. Vote, vote by proxy and otherwise act in accordance with Board policy and applicable procedure on all matters relating to the corporations, limited partnerships, limited liability companies and other entities through which the System holds title to investments, including but not limited to matters of corporate governance;

- f. Establishing and directing the maintenance of an effective system of internal controls and records and accounts following recognized accounting principles;
- g. Directing the preparation of accurate statistical records to serve as a basis for actuarial investigations, valuations, and computations in sufficient detail to permit the valuation and establishment of experience factors;
- h. Appointing such employees as are necessary to carry out the provisions of the law applicable to the System and defining the duties thereof;
- i. Initiating, prosecuting, and defending appeals, writs and other litigation in the courts and administrative forums as necessary to comply with and enforce applicable law and to carry out the decisions and policies of the Board. Board approval will be obtained before taking such action where required by Board policy or otherwise appropriate under the circumstances;
- j. Settling and compromising claims and controversies and paying on behalf of the Board and the System all claims and controversies relating to benefits, personnel, and other legal matters for amounts not to exceed \$200,000 per individual claim and controversy;
- k. Accept service of summons and any other legal service of process for and on behalf of the Board and the System;
- l. Initiate, prosecute and defend subrogation actions, appeals, and other related litigation matters, such as cross complaints, and to file liens, intervene in court proceeding, join parties to actions, consolidate actions, compromise claims, contract with outside counsel, and take other such action as necessary to recover amounts owed to the System.
- m. Make programmatic decisions regarding the System's defined contribution programs, including but not limited to selecting investment options available to plan participants. Any authority the Chief Executive Officer has to enter into contracts shall be subject to the limitations imposed in section above.

The Chief Executive Officer shall perform such other duties as may be required for the administration of the System, other provisions of law governing the System, and for the transaction of its business.

The Chief Executive Officer may sub-delegate any and all of the powers and authority as appropriate as provided for by Section 22301 of the Education Code.

Appendix II


CERTIFICATE OF
CHIEF EXECUTIVE OFFICER
CALIFORNIA STATE TEACHERS' RETIREMENT SYSTEM

The undersigned hereby states that:

1. I am the duly appointed and incumbent Chief Executive Officer (CEO) of the California State Teachers' Retirement System (System).
2. As CEO of the System, I act as the Secretary to the Teachers' Retirement Board (Board) and its Investment Committee and keep a record of all Board and Investment Committee proceedings.
3. Pursuant to its duly adopted policy guidelines, at its duly noticed and conducted meeting on December 6, 2001, the Investment Committee gave prior conceptual approval of the transactions necessary to incur debt, encumber assets and otherwise leverage the System's real estate portfolio.
4. The conceptual approval described in Paragraph 3 above was and is the conceptual approval of the transactions described on Schedule 1 attached hereto (Transactions) required by (and satisfies the requirements of) Paragraph III.3 of the resolution of the Board entitled "Delegation of Authority to Chief Executive Officer, California State Teachers' Retirement System," adopted by the Board on November 6, 2002 (Resolution).
5. Pursuant to the Resolution and the power given to it by Section 22208 of the Education Code, and Title 5, Cal. Admin. Code Section 20520, the Board delegated to me, the CEO, the authority to act finally with respect to the execution of documents and the issuance of instructions, both when the System is acting directly and when the System is acting in its capacity as a constituent of an entity in which the System holds an interest, necessary to implement certain investment transactions of the System.
6. The Resolution was duly adopted by the Board, remains unmodified and in full force and effect and applies to and vests in me, the CEO, the authority to execute and deliver all documents on behalf of the System in connection with the Transactions.
7. Pursuant to that certain "Delegation of Authority by Chief Executive Officer, California State Teachers' Retirement System (Investment Transactions)", dated November 6, 2002 (Delegation) and the power given to me by Section 22301 of the Education Code, I have delegated to the Chief Investment Officer (CIO) of the System the authority to execute documents and issue instructions, both when the System is acting directly and when the System is acting in its capacity as a constituent of an entity in which the System holds an interest, necessary to implement certain investment transactions of the System.
8. The Delegation was duly made by me, remains unmodified and in full force and effect and applies to and vests in the CIO the authority to execute and deliver all documents on behalf of the System in connection with the Transactions.

9. Christopher J. Ailman is the duly appointed and incumbent Chief Investment Officer of the System. Schedule 2 attached hereto contains the signature of said CIO, as it will appear on all signed documents, instruments and other papers implementing the Transactions.

November 8, 2002



JACK EHNES
Chief Executive Officer

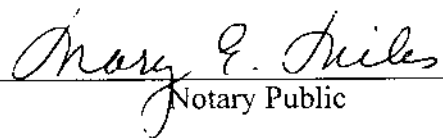
STATE OF CALIFORNIA)

) ss:

COUNTY OF SACRAMENTO)

On November 8, 2002 before me, the undersigned, a Notary Public in and for said County and State, personally appeared JACK EHNES, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.



Notary Public



Memorandum

Executive Office
916-229-3700

Date: May 10, 2007
To: File
From: Jack Ehnes, Chief Executive Officer
Subject: **DELEGATION OF AUTHORITY FOR EXECUTING CONTRACTS**

As the appointing power and chief administrative officer responsible for the administration of the California State Teachers' Retirement System and the plan pursuant to the policies and rules adopted by the board, I am delegating the authority to enter into and execute contracts, in an amount not to exceed \$500,000 per contract, to the Chief Financial Officer.

5/10/07
Date

Jack Ehnes
Chief Executive Officer

DELEGATION OF AUTHORITY
BY CHIEF EXECUTIVE OFFICER
CALIFORNIA STATE TEACHERS' RETIREMENT SYSTEM
(INVESTMENT TRANSACTIONS)

The undersigned hereby states that:

1. I am the duly appointed and incumbent Chief Executive Officer of the California State Teachers, Retirement System (System).
2. Pursuant to section 22301 of the Education Code and the resolution entitled "Delegation of Authority to Chief Executive Officer, California State Teachers, Retirement System," adopted by the Teachers Retirement Board on December 8, 2005, (a copy of which is attached hereto as Attachment 1 and incorporated by reference), I hereby delegate my authority with respect to the investment operations of the System as follows:

With respect to the investments of the system involving real estate, mortgages, equities, fixed income alternative investments, corporate governance, credit enhancement, and special situations, I hereby delegate my authority to execute all documents or authorize the issuance of instructions, both when the System is acting directly and in its capacity as a constituent of an entity in which the System holds an interest, necessary to purchase, sell, convey, assign, incur debt, encumber assets or otherwise manage investments and assets of the System, in compliance with policy guidelines adopted by the Board or by its Investment Committee, to the then duly appointed and incumbent Chief Investment Officer, or to the then duly appointed and incumbent Director of Global Equities and Operations, or to the then duly appointed and incumbent Director of Fixed Income. Any one of said officers may act individually without the joinder of the others.

Date: _____

10/15/07



JACK EHNES
Chief Executive Officer

Delegation of Authority
To
Chief of Staff, California State Teachers' Retirement System

WHEREAS, Section 22208 of the Education Code, and Title 5, Cal. Admin. Code Section 20520, give the Teachers' Retirement Board authority to delegate any acts within its power to the Chief Executive Officer (CEO) either to act finally, or to act subject to review, ratification, or reversal by the Board; and

WHEREAS, the Teachers' Retirement Board has delegated authority to the Chief Executive Officer through that certain Delegation of Authority, dated December 8, 2005; and

WHEREAS, the Chief Executive Officer may subdelegate any and all of the powers and authority as appropriate pursuant to Section 22301 of the Education Code and paragraph II(3) of that Delegation; and

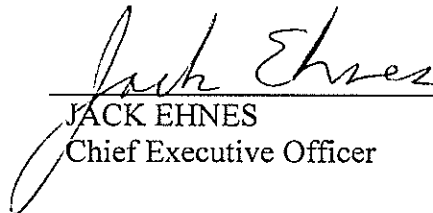
WHEREAS, the Chief Executive Officer expects to be spending significant time focusing on emerging funding issues and strategies, and less time administering the System, and as a result the Chief of Staff will need subdelegated authority to carry on the day-to-day business of the System. Now, therefore, be it

RESOLVED, that the Chief Executive Officer does hereby subdelegate to the Chief of Staff authority as follows:

The full and continuous use of the Chief Executive Officer's powers are vested in the Chief of Staff who shall act in the Chief Executive Officer's stead at all times, until such time as the position or its authority to act has been revoked.

RESOLVED further, that this Delegation shall be effective when executed by the Chief Executive Officer

November 18, 2009



JACK EHNES
Chief Executive Officer

Delegation of Authority
to
Human Resources Executive Officer,
California State Teachers' Retirement System

WHEREAS, Section 22208 of the Education Code, and the California Code of Regulations, title 5, section 20520, give the Teachers' Retirement Board authority to delegate any acts within its power to the Chief Executive Officer (CEO) either to act finally, or to act subject to review, ratification, or reversal by the board; and

WHEREAS, the CEO may delegate any and all of the powers and authority as appropriate pursuant to Section 22301 of the Education Code. Now, therefore, be it:

RESOLVED, that the CEO does hereby delegate to the Human Resources Executive Officer the power and authority as follows:

With respect to a CalSTRS employee's, former employee's or entity's dispute regarding personnel matters, I hereby delegate my authority to settle any dispute up to \$50,000.00. I further delegate my authority to sign any and all documents relating to personnel matters, including but not limited to adverse actions, as the official representative of CalSTRS.

RESOLVED further, that this Delegation shall be effective when executed by the Chief Executive Officer.

September 21, 2011



JACK EHNES
Chief Executive Officer

Delegation of Authority
to
Deputy Chief Investment Officer,
California State Teachers' Retirement System

WHEREAS, Section 22208 of the Education Code, and California Code of Regulations, title 5, section 20520, give the Teachers' Retirement Board authority to delegate any acts within its power to the Chief Executive Officer (CEO) either to act finally, or to act subject to review, ratification, or reversal by the Board; and

WHEREAS, the Teachers' Retirement Board has delegated authority to the Chief Executive Officer through that certain Delegation of Authority, dated March 23, 2010, to execute documents and issue instructions to implement investment transactions; and

WHEREAS, the Chief Executive Officer may delegate any and all of the powers and authority as appropriate pursuant to Section 22301 of the Education Code and that certain Delegation; and

WHEREAS, the Chief Executive Officer has delegated authority to execute documents and issue instructions to implement investment transactions to the Chief Investment Officer; and


WHEREAS, the Chief Investment Officer is at times unavailable to execute documents or issue instructions required for the regular operation of the Investments branch. Now, therefore, be it

RESOLVED, that the Chief Executive Officer does hereby delegate to the then duly appointed and incumbent Deputy Chief Investment Officer, authority as follows:

With respect to the investments of the System involving mortgages, equities, fixed income, corporate governance, alternative investments, credit enhancement, and real estate, I hereby delegate my authority to execute all documents or authorize the issuance of instructions, both when the System is acting directly and in its capacity as a constituent of an entity in which the System holds an interest necessary to purchase, sell, convey, assign, incur debt, encumber assets or otherwise manage investments and assets of the System, in compliance with policy guidelines adopted by the Board or by its Investment Committee, to the duly appointed and incumbent Deputy Chief Investment Officer.

RESOLVED further, that this Delegation shall be effective when executed by the Chief Executive Officer.

February 23, 2012



JACK EHNES
Chief Executive Officer

STATE OF CALIFORNIA

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ss:

COUNTY OF YOLO

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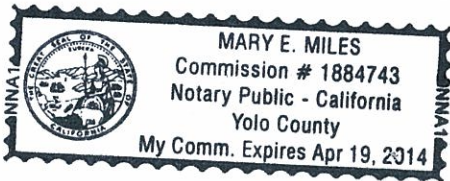
On February 23, 2012, before me, Mary E. Miles, Notary Public, personally appeared JACK EHNES, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Mary E. Miles

Notary Public



Delegation of Authority
to
Director of Innovation and Risk,
California State Teachers' Retirement System

WHEREAS, Section 22208 of the Education Code, and California Code of Regulations, title 5, section 20520, give the Teachers' Retirement Board authority to delegate any acts within its power to the Chief Executive Officer (CEO) either to act finally, or to act subject to review, ratification, or reversal by the Board; and

WHEREAS, the Teachers' Retirement Board has delegated authority to the Chief Executive Officer through that certain Delegation of Authority, dated March 23, 2010, to execute documents and issue instructions to implement investment transactions; and

WHEREAS, the Chief Executive Officer may delegate any and all of the powers and authority as appropriate pursuant to Section 22301 of the Education Code and that certain Delegation; and

WHEREAS, the Chief Executive Officer has delegated authority to execute documents and issue instructions to implement investment transactions to the Chief Investment Officer; and

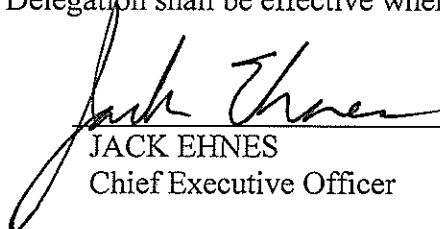
WHEREAS, the Chief Investment Officer is at times unavailable to execute documents or issue instructions required for the regular operation of the Investments branch. Now, therefore, be it

RESOLVED, that the Chief Executive Officer does hereby delegate to the then duly appointed and incumbent Director of Innovation and Risk, authority as follows:

With respect to the investments of the System involving mortgages, equities, fixed income, corporate governance, alternative investments, credit enhancement, and real estate, with the exception of (1) investment recommendations concerning the innovation and risk and real estate asset classes, (2) innovation and risk transactions, and (3) trade tickets, I hereby delegate my authority to execute all documents or authorize the issuance of instructions, both when the System is acting directly and in its capacity as a constituent of an entity in which the System holds an interest necessary to purchase, sell, convey, assign, incur debt, encumber assets or otherwise manage investments and assets of the System, in compliance with policy guidelines adopted by the Board or by its Investment Committee, to the duly appointed and incumbent Director of Innovation and Risk.

RESOLVED further, that this Delegation shall be effective when executed by the Chief Executive Officer.

February 23, 2012



JACK EHNES
Chief Executive Officer

STATE OF CALIFORNIA)
) ss:
COUNTY OF YOLO)

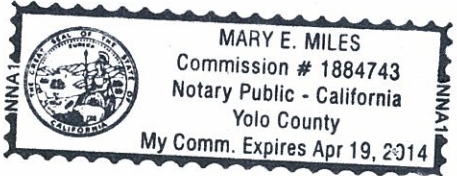
On February 23, 2012, before me, Mary E. Miles, Notary Public, personally appeared JACK EHNES, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Mary E. Miles

Notary Public





Memorandum

*Executive Office, MS-1
(916) 229-3700
jehnes@CalSTRS.com*

Date: March 29, 2012

To: File

From: Jack Ehnes
Chief Executive Officer

Subject: DELEGATION OF AUTHORITY FOR SIGNING STATEMENT OF ISSUES

As the Appointing Power and Chief Executive Officer responsible for the administration of the California State Teachers' Retirement System and the plan pursuant to the policies and rules adopted by the board, I am delegating the authority to review, approve and sign all Statements of Issues for administrative appeals involving or arising out of audits to the Chief Auditor.

Dated

3/29/12



Jack Ehnes

Chief Executive Officer

**DELEGATION OF AUTHORITY
TO
DEPUTY CHIEF EXECUTIVE OFFICER
OF BENEFITS AND SERVICES**

WHEREAS, Section 22208 of the Education Code, and Title 5, California Administrative Code Section 20520, give the Teachers' Retirement Board the authority to delegate any acts within its power to the Chief Executive Officer either to act finally, or to act subject to review, ratification or reversal by the Board; and

WHEREAS, the Teachers' Retirement Board has delegated authority to the Chief Executive Officer through that certain Delegation of Authority, dated March 23, 2010; and

WHEREAS, the Chief Executive Officer may delegate any and all of the powers and authority as appropriate pursuant to Section 22301 of the Education Code and that certain Delegation. Now, therefore, be it

RESOLVED that the Chief Executive Officer does hereby delegate to the then duly appointed and incumbent Deputy Chief Executive Officer of Benefits and Services, authority as follows:

I hereby delegate my authority to execute all documents required and to authorize the issuance of instructions needed to facilitate employer reporting directly to CalSTRS for any school district, community college district or employing agency that desires to report directly to CalSTRS.

RESOLVED further, that this Delegation shall be effective when executed by the Chief Executive Officer.

April 10, 2012



JACK EHNES
Chief Executive Officer

Delegation of Authority
to the
Chief Operating Officer
California State Teachers' Retirement System

WHEREAS, Section 22208 of the Education Code, and California Code of Regulations, title 5, section 20520, give the Teachers' Retirement Board authority to delegate any acts within its power to the Chief Executive Officer, either to act finally, or to act subject to review, ratification, or reversal by the Board; and

WHEREAS, the Teachers' Retirement Board has delegated authority to the Chief Executive Officer through that certain Delegation of Authority, dated March 23, 2010, to perform the duties required for the administration of the System; and

WHEREAS, the Chief Executive Officer may sub-delegate any and all of the powers and authority as appropriate, pursuant to Section 22301 of the Education Code and that certain Delegation of Authority, dated March 23, 2010; and

WHEREAS, the Chief Executive Officer continues to spend significant time focusing on emerging funding issues and strategies, and as a result, the Chief Operating Officer needs sub-delegated authority to carry on the day-to-day business of the System. Now, therefore, be it

RESOLVED, that the Chief Executive Officer does hereby sub-delegate to the then duly appointed and incumbent Chief Operating Officer, authority as follows:

The full and continuous use of the Chief Executive Officer's powers are vested in the Chief Operating Officer, who shall act in the Chief Executive Officer's stead at all times, until such time as the position or its authority to act has been revoked.

RESOLVED further, that this Delegation shall be effective when executed by the Chief Executive Officer.

March 18, 2013



JACK EHNES
Chief Executive Officer

STATE OF CALIFORNIA

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ss:

COUNTY OF YOLO

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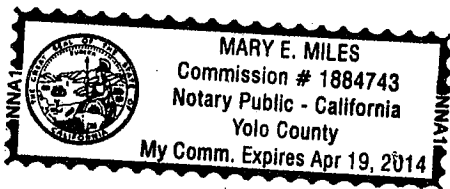
On March 18, 2013, before me, Mary E. Miles, Notary Public, personally appeared JACK EHNES, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Mary E. Miles

Notary Public



Delegation of Authority
To
Director of Human Resources
California State Teachers' Retirement System

WHEREAS, Section 22208 of the Education Code, and the California Code of Regulations, title 5, section 20520, give the Teachers' Retirement Board authority to delegate any acts within its power to the Chief Executive Officer (CEO) either to act finally, or to act subject to review, ratification, or reversal by the board; and

WHEREAS, the CEO may delegate any and all of the powers and authority as appropriate pursuant to Section 22301 of the Education Code. Now, therefore, be it:

RESOLVED, that the CEO does hereby delegate to the Director of Human Resources the power and authority as follows:

With respect to a CalSTRS employee's, former employee's or entity's dispute regarding personnel matters, I hereby delegate my authority to settle any dispute up to \$50,000.00. I further delegate my authority to sign any and all documents relating to personnel matters, including but not limited to adverse actions, as the official representative of CalSTRS.

RESOLVED further, that this Delegation shall be effective when executed by the Chief Executive Officer.

July 29, 2014



JACK EHNES
Chief Executive Officer

Delegation of Authority
To
Benefits & Services Executive Officer
California State Teachers' Retirement System

WHEREAS, Section 22208 of the Education Code, and the California Code of Regulations, Title 5, Section 20520, give the Teachers' Retirement Board authority to delegate any acts within its power to the Chief Executive Officer (CEO) either to act finally, or to act subject to review, ratification, or reversal by the Board; and

WHEREAS, the Teachers' Retirement Board has delegated authority to the CEO through that certain Delegation of Authority, dated July 14, 2016; and

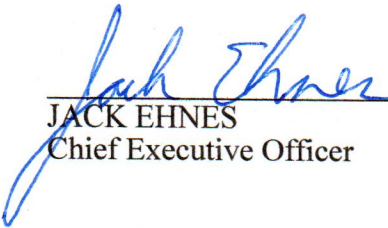
WHEREAS, the CEO may delegate any and all of the powers and authority as appropriate pursuant to Section 22301 of the Education Code. Now therefore, be it:

RESOLVED, that the CEO does hereby subdelegate to the Benefits & Services Executive Officer the power and authority as follows:

Initiate, prosecute and defend subrogation actions, appeals, and other related litigation matters, such as cross complaints, and to file liens, intervene in court proceeding, join parties to actions, consolidate actions, compromise claims, contract with outside counsel, and take other such action as necessary to recover amounts owed to the System.

RESOLVED, further, that this Delegation shall be effective when executed by the CEO.

October 17, 2016



JACK EHNES
Chief Executive Officer

Appendix III

TITLE 5. EDUCATION
DIVISION 3. TEACHERS' RETIREMENT SYSTEM
CHAPTER 1. TEACHERS' RETIREMENT SYSTEM
ARTICLE 14. INVESTMENT RELATIONSHIPS AND CAMPAIGN
CONTRIBUTIONS

§ 24010. Prohibitions on Campaign Contributions

(a) No party engaging or seeking to engage in an Investment Relationship with CalSTRS may make any campaign contributions, as defined in The Political Reform Act (Gov. Code, § 81000 *et seq.*), valued in excess of \$1,000, individually, or \$5000 in the aggregate from the party engaged in the Investment Relationship and the individuals identified in subdivision (d) collectively, in any twelve month period beginning on the dates identified in subdivision (e), to any person designated in subdivision (c) below.

(b) For purposes of this Article 14, "Investment Relationship" means a relationship between a non-governmental party and CalSTRS for the purpose of providing investment services such as money management or fund management services, investment advice or consulting (including making recommendations for the placement or allocation of investment funds), and investment support services (including market research, fund accounting, custodial services, and fiduciary advice) for investments placed in the Teachers' Retirement Fund.

(c) This prohibition applies to campaign contributions made to or on behalf of CalSTRS officers and employees, any existing Teachers' Retirement Board member, the Governor, Controller, Treasurer, and Superintendent of Public Instruction, candidates for Teachers' Retirement Board member, and candidates for the offices of Governor, Controller, Treasurer, and Superintendent of Public Instruction.

(d) This prohibition applies to those parties currently engaging in or seeking to engage in an Investment Relationship with CalSTRS which is expected to generate at least \$100,000 annually in income, fees, or other revenue to the party, and specifically includes:

(1) Those individuals employed by or associated with the parties described in this Section 24010(b), above, who are required to file a Form 700 Statement of Economic Interest pursuant to Government Code Section 81000 *et seq.*, the Fair Political Practices Commission Regulations contained in Title 2, Division 6, California Code of Regulations Section 18109 *et seq.*, and the Teachers' Retirement System Regulations contained in Title 5, Division 3, California Code of Regulations Section 22000, *et seq.*; or

(2) "Authorized Personnel/Key Personnel" as defined and identified by the contracting party in the "Authorized Personnel/Key Personnel exhibit" incorporated in or attached to the contract between the contracting party entering into the Investment Relationship and CalSTRS; or

(3) Those individuals who expect to and/or do experience a material financial effect on their economic interests including salary, bonuses, options, or other financial incentives directly deriving from an Investment Relationship with CalSTRS.

This prohibition also applies to contributions from any other entities or individuals made at the direction of such parties identified above in this subdivision (d).

(e) For parties defined in subdivision (d) above, the prohibition set forth in this section shall apply to the time period which begins

(1) On the date CalSTRS first announces a procurement or search process that could lead to an Investment Relationship which is likely to generate at least \$100,000 annually in income, fees, or other revenue to the party; or

(2) On the date a party identified in subdivision (d) above approaches CalSTRS with a proposal to enter into an Investment Relationship with CalSTRS by discussing the specific facts and financial terms of a particular investment transaction or strategy, whichever is earlier, and ends when the Investment Relationship is terminated by any party for any reason, or when CalSTRS communicates its decision not to pursue the Investment Relationship.

AUTHORITY:

Note: Authority cited: California Constitution, Article XVI, Section 17; and Sections 22202, 22207, 22208, 22214, 22250, 22253, and 22305, Education Code. Reference: California Constitution, Article XVI, Section 17; and Sections 22250 and 22253, Education Code.

HISTORY:

1. New article 14 (sections 24010-24013) and section filed 10-29-2007; operative 11-28-2007 (Register 2007, No. 44).

§ 24011. Disclosure and Recusal Requirement for Campaign Contributions

(a) No CalSTRS officer, employee or current Teachers' Retirement Board member, including the Controller, Treasurer, and Superintendent of Public Instruction shall make, participate in making or in any way attempt to use his or her official position to influence a decision involving an Investment Relationship with CalSTRS if the officer, employee or member has received, solicited or directed a campaign contribution, as defined in The Political Reform Act (Gov. Code, § 81000 *et seq.*), valued in excess of \$1,000, individually or \$5000 in the aggregate, in any twelve month period prior to the dates identified in Section 24010, subdivision (e) from any person designated in Section 24010, subdivision (d). For purposes of this section, a member appointed by the Governor and the Director of Finance shall also be deemed to have received a contribution if the Governor who appointed the member or Director of Finance has received a contribution within the twelve month period prior to the dates identified in Section 24010, subdivision (e) from any person designated in Section 24010, subdivision (d).

(b) If the disqualification provision of subdivision (a) results in the lack of a quorum for the purposes of taking action on any item before the Board or any of its committees, a sufficient number of Board members to constitute a quorum shall be drawn by lot from the otherwise disqualified Board members for the purpose of establishing a quorum and taking action on items before the Board or any of its committees. Board members who have been drawn by lot

to constitute a quorum shall have their participation deemed as necessary and shall be exempt from the restrictions of subdivision (a) for the purpose of establishing a quorum and participating in the deliberations and voting on an item for which a quorum could not be established absent this waiver of the restrictions of subdivision (a).

AUTHORITY:

Note: Authority cited: California Constitution, Article XVI, Section 17; and Sections 22202, 22207, 22208, 22214, 22250, 22253, and 22305, Education Code. Reference: California Constitution, Article XVI, Section 17; and Sections 22250 and 22253, Education Code.

HISTORY:

1. New section filed 10-29-2007; operative 11-28-2007 (Register 2007, No. 44).

§ 24012. Remedies, Enforcement and Safe Harbors

(a) CalSTRS' General Counsel shall cause an independent investigation to be performed for any reported violation of Sections 24010 and 24011, and report any documented violation to the Board for action.

(b) If any party seeking an Investment Relationship with CalSTRS is found to be in violation of Section 24010, that party shall be disqualified from engaging in an Investment Relationship with CalSTRS for a period of two years.

(c) Any party who has an existing Investment Relationship with CalSTRS and who is found to be in violation of the provisions of Section 24010 shall be subject to disqualification from doing future or additional business with CalSTRS for a period of two years.

(d) If a party voluntarily reports a violation of Section 24010 to the CalSTRS General Counsel within ninety days of the contribution being made and it is established pursuant to an independent investigation that the violation was inadvertent, the disqualification provision of subdivision (c) will not be applied. This safe harbor provision does not apply to a knowing or intentional violation of Section 24010.

(e) CalSTRS staff shall maintain a current list of parties engaged in an Investment Relationship subject to Section 24010, subdivision (d). The disclosure and recusal requirements of Section 24011, subdivision (a) shall not apply to any CalSTRS officer, employee or current Teachers' Retirement Board member, including the Controller, Treasurer, and Superintendent of Public Instruction if the Investment Relationship has not been published on the list maintained by CalSTRS staff.

AUTHORITY:

Note: Authority cited: California Constitution, Article XVI, Section 17; and Sections 22202, 22207, 22208, 22214, 22250, 22253, and 22305, Education Code. Reference: California Constitution, Article XVI, Section 17; and Sections 22250 and 22253, Education Code.

HISTORY:

1. New section filed 10-29-2007; operative 11-28-2007 (Register 2007, No. 44).

§ 24013. Definitions

Terms not specifically defined herein are defined in the Government Code, the Education Code, the Political Reform Act, the Fair Political Practices Commission Regulations, and the Teachers' Retirement System Regulations.

AUTHORITY:

Note: Authority cited: California Constitution, Article XVI, Section 17; and Sections 22202, 22207, 22208, 22214, 22250, 22253, and 22305, Education Code. Reference: California Constitution, Article XVI, Section 17; and Sections 22250 and 22253, Education Code.

HISTORY:

1. New section filed 10-29-2007; operative 11-28-2007 (Register 2007, No. 44).